CORRIDOR ALTERNATIVES EVALUATION SUMMARY REPORT

GULF COAST PARKWAY PD&E STUDY

from US 98 to US 231 with a connection to US 98 in Springfield
Gulf County and Bay County, Florida

FINANCIAL PROJECT ID NUMBER: 410981-1-14-01

Prepared for:

FLORIDA DEPARTMENT OF TRANSPORTATION

and

FEDERAL HIGHWAY ADMINISTRATION

Prepared by:
PBS&J

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1.0 Project History

Gulf County is one of eight counties comprising the Northwest Florida Rural Area of Critical Economic Concern, designated by Governor Bush in Executive Order 99-275 on November 8, 1999 and re-designated by Executive Order 04-250. Rural Areas of Economic Concern are rural areas that have been adversely affected by an extraordinary economic event or natural disaster, or present a unique economic development opportunity of regional impact that would create more than 1,000 jobs over a five-year period. Local governments within areas having this designation receive priority under the State's Rural Economic Development Initiative (REDI), as established in Chapter 288.0656 F.S. In addition, the Governor, acting through REDI, may waive criteria, requirements, or similar provisions of any economic development incentive for these areas.

Gulf County, with a population of 13,332 in 2000, had built its economy around two industries that benefited from its abundant natural resources and coastal location: fishing and forestry. In the 1990's, the county's economy suffered two major setbacks. First was the passage of a constitutional amendment banning the use of a certain type of fishing net with a propensity for catching sea turtles, devastating the local fishing industry. This was followed in 1998 by the closing of the Florida Coast Paper Mill which caused the local unemployment rate to soar to 21.6%.

Opportunity Florida, a non-profit, regional economic development organization, was created to strengthen the business environment in the eight-county area designated as the Northwest Florida Rural Area of Critical Economic Concern. It was Opportunity Florida that first promoted the development of a new transportation corridor as a measure to improve the economic competitiveness of Gulf County. The proposed new corridor, known as the Gulf Coast Parkway (GCP), has subsequently been adopted into the Bay County Long Range Transportation Plan (LRTP).

1.1 PURPOSE AND NEED FOR THE PROJECT

The Purpose and Need of the proposed GCP is to 1) enhance economic development in Gulf County through provision of direct access to major transportation facilities (regional freight transportation routes and intermodal facilities); improved mobility; and direct access to tourist destinations in south Gulf County; 2) improve mobility within the regional transportation network by providing a new connection to existing and future transportation routes consistent with the Bay County LRTP; 3) improve security of the Tyndall AFB by providing a shorter detour route, and 4) improve hurricane evacuation for residents of coastal Gulf County by providing an additional evacuation route.

The following sections discuss the considerations for the project's Purpose and Need in greater detail.

1.1.1 Enhance Gulf County's Economic Competiveness

The need for economic development within the study area, and especially in Gulf County, has been made evident by the classification of Gulf County as a Rural Area of Critical Economic Concern. As a result of this classification, several organizations are in place to promote economic development activities in the northwest region of Florida. These include Opportunity Florida, Enterprise Florida, and Florida's Great Northwest, Inc. Each of these partnerships is focused on providing economic development initiatives and supporting activities that create economic advantages in the region; although, Opportunity Florida is more narrowly focused on those counties within the Northwest Florida Rural Area of Critical Economic Concern: Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Liberty and Washington counties.

The GCP would also serve as a connection to strategic intermodal facilities throughout the region, such as the Panama City-Bay County International Airport, the Port of Panama City and the (future) Port of Port St. Joe, and the Panama City Port Authority Intermodal Distribution Center, currently under construction.

Reduce Travel Times to Employment Centers in Bay County

The GCP would reduce travel times to employment centers in Bay County providing greater job opportunities for those residents of Gulf County that have suffered from the increased unemployment rates in the county.

Improve Access between Enterprise Zones and US 231

Among the efforts to improve economic conditions in Gulf County is the establishment of enterprise zones. Within the project study area enterprise zones have been designated along US 98 from south of the city of Port St. Joe to CR 386, and along CR 386 from US 98 to the Overstreet area. Improved access between these enterprise zones and US 231 provided by the GCP would encourage development in these areas and contribute to Gulf County's economic growth initiatives.

Provide a Direct Route from South Gulf County to US 231 and Freight Transfer Facilities in Bay County

The GCP would provide a direct connection from south Gulf County to US 231 and the freight transfer facilities at the Panama City Port Authority Intermodal Distribution Center. The linkage provided by the GCP to the Intermodal Distribution Center would expand the variety of economic development opportunities that could occur in Gulf County and improve access to and from the Port of Port St. Joe, making it more attractive to potential users by expanding the available methods of distributing goods to markets.

Provide a More Direct Route from South Gulf County to the Panama City International Airport

The existing Panama City-Bay County International Airport is a part of Florida's Strategic Intermodal System (SIS). The proposed airport under development would serve the community through the SIS as well. Roadways benefit from connecting to SIS facilities because of greater access to economic markets. Gulf County would benefit from the linkage provided by the GCP to the airport and other intermodal freight facilities because it would increase the access to goods being shipped via these locations. In addition, the Port of Port St. Joe would become more attractive to potential users through improved connections to intermodal facilities via the GCP; in turn, this would provide Gulf County greater access to global markets.

Provide a More Direct Route for Tourists Traveling US 231 to South Gulf County

Gulf County must compete with Bay County for tourist dollars. Bay County has an estimated seven million people visit their beaches annually. Access to Gulf County beaches is mostly by US 231 to US 98 (Tyndall Parkway); then through the communities of Springfield, Callaway, and Parker; across the Intracoastal Waterway; and finally through the Tyndall Air Force Base Reservation to the desired destination. An alternate but little used route is the two-lane SR 71 or SR 71/CR 386, depending on the destination. A new, more direct route bypassing the congested sections of US 231 and US 98 (Tyndall Parkway) and allowing for high-speed travel would make the Gulf County beaches a more accessible destination.

The GCP would also provide a direct route to south Gulf County recreational resources along the coast. Additionally, the improved connection between the airport and Gulf County would also make the coastal communities more accessible and appealing for tourists.

1.1.2 Improve Mobility and Connectivity within the Regional Transportation Network

The proposed project would provide a new link in the regional transportation network that connects with other regional transportation facilities relieving congested segments of existing roadways and improving access within the region by providing connections to other regional facilities.

Reduce Congestion on the Tyndall Parkway (US 98)

The Tyndall Parkway, US 98 north of the Tyndall Air Force Base Reservation, currently operates at Level of Service (LOS) F. The addition of the GCP to the regional transportation network will benefit US 98 by raising its current Level of Service and extending the time before improvements are needed by transferring some of the through traffic to roads with greater capacity, providing a more balanced highway network.

Provide Future Traffic Capacity between South Gulf County and Bay County

Prior to 1990, Gulf County experienced slow, but steady growth at a rate of around 6%. However, between the 1990 and 2000 census, Gulf County's population increased by 16.1%. Future population growth is projected to be even greater. The Bureau of Economic and Business Research at the University of Florida estimates that Gulf County's population has increased approximately 22% between 2000 and 2004. The US Geological Survey in Open-File Report 9, *Water use trends and demand projections in the Northwest Florida Water Management District* (1998), projects Gulf County's population to change 36% between 2005 and 2020.

Florida's growth management legislation encourages local governments to be pro-active in planning for future growth and provide the necessary infrastructure needed to support the projected level of growth. In order to adequately prepare for the anticipated growth and development along the Gulf Coast in Gulf County, improved access is needed between US 98 in Gulf County and US 231 in Bay County. The GCP would provide that access.

Provide a More Efficient Detour Route

There are a variety of scenarios under which US 98 could be closed to through traffic. Should the DuPont Bridge be closed due to damage, the use of a detour would be required for a lengthy period of time. A 50-mile long detour is particularly onerous if made daily over a period of months. The GCP would provide a more efficient detour route, reducing the detour distance by potentially 30 miles, depending on which corridor is selected.

Maintain Continuity with Planned Future Transportation Projects

The GCP should be consistent with the approved state and local comprehensive and transportation plans.

1.1.3 Improve Security of the Tyndall Air Force Base

US 98 is a major east-west roadway serving the Gulf Coast region. A large segment of US 98, between the City of Port St. Joe and Panama City, provides the only through route within this region and lies partly

within the Tyndall Air Force Base Reservation. When US 98 through Tyndall is closed for any reason vehicles must travel a detour route approximately 50 miles long to reach their destination. The closing of US 98 is periodically necessary for security purposes at Tyndall Air Force Base. Any time that a training drone is launched US 98, within one mile of the runway, is closed; for security reasons they will not release data on the frequency or timing of these launches. There has also been past instances where accidents involving drone or plane crashes have required the base to close portions of US 98. In November 1996 and again in February 2002 drone crashes occurred, also in March 2003 there was a plane crash at the base. Providing an alternate route to US 98 in the Callaway/Springfield area benefits both the base and the traveling public who would not have to travel an approximately 50 mile detour to reach their destination.

1.1.4 Improve Hurricane Evacuation Capability

Recent hurricane seasons have demonstrated the need for improved evacuation routes and additional route options to accommodate area residents and visitors, particularly in Gulf County where there are limited evacuation routes. US 98 is not an acceptable hurricane evacuation route, as it is within the surge zone for a Category 3, or greater, hurricane through most of the corridor. The east-west orientation of US 98 does not promote efficient evacuation for residents of coastal communities who are usually traveling north to seek safe shelter. Evacuation on US 98 through Tyndall Air Force Base is further complicated by the DuPont Bridge, which is a high-level bridge that must be closed once winds reach 55 mph. The closure of the bridge forces drivers to travel east on US 98 for long distances before they are able to turn north and out of the hurricane surge zone areas.

In the event of an evacuation, Bay County is served by northbound SR 231, SR 77, and SR 79. Those needing to evacuate Gulf County are served by CR 386 and SR 71. From CR 386, residents must travel SR 71 to Wewahitchka. From there they either remain on the two-lane SR 71 or take SR 22 west to US 231. Although the coastal areas in Gulf County are lightly populated at this time, projected future development and corresponding population growth in the area, as discussed in section 1.1.2, intensifies the need for improved evacuation routes. The GCP would provide an alternate hurricane evacuation route for the coastal communities and it would enhance the ability of rescue and recovery vehicles to access the area after the storm has passed.

1.2 PRIOR STUDIES

A corridor feasibility study to determine the economic feasibility of providing a new roadway between US 98 in Gulf County and US 231 in Bay County, and to identify a potential corridor in which to locate the highway, was completed in 2004. The study area for the corridor study included parts of three counties (Bay, Gulf, and Calhoun) between US 98 to the south and US 231 to the north. Figure 1-1 shows the corridor study area.

A typical section for the proposed roadway, consisting of a two-lane roadway offset within a 250-foot right-of-way that would allow for future expansion to four lanes, was established as the desired configuration. Through early coordination with local governments, the typical section was revised to include a multi-use trail. The *Gulf Coast Parkway Corridor Feasibility Report*, published in January 2004, describes the development of multiple alternative corridors, the feasibility analysis, and the selection of corridors recommended for further study (see Figure 1-2 for these corridors). The *Gulf Coast Parkway Concept Master Plan Report,* which evaluated the Corridors recommended for further study in more detail, was published in February 2004.

A *State Environmental Impact Report* (SEIR) was initiated in 2005. The *GCP Corridor Feasibility Study* and the SEIR study processes, including public and review agency meetings, resulted in the identification of several corridor options just prior to the appropriation of federal funds for the GCP.

Upon the appropriation of federal funding for the project, the environmental documentation changed from a SEIR to an *Environmental Impact Statement* (EIS). Additionally, the enactment of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) resulted in the project being included in the Florida Department of Transportation's (FDOT) Efficient Transportation Decision Making (ETDM) process (since a Notice of Intent to prepare the EIS had not been issued prior to August 11, 2005). ETDM is the FDOT's requisite streamlining process for implementing early agency and public involvement in transportation projects. ETDM has been approved by FHWA as meeting the statutory requirements of Section 6002 of SAFETEA-LU.

Gulf Coast Parkway PD&E Study
Corridor Alternatives Evaluation Summary Report

FIGURE 1-1: Gulf Coast Parkway Study Area

Gulf Coast Parkway PD&E Study
Corridor Alternatives Evaluation Summary Report

FIGURE 1-2: Corridor Study Alternatives

1.3 EFFICIENT TRANSPORTATION DECISION MAKING

The GCP project has had a lengthy and complex journey through the ETDM process. As one of the first transportation projects in the District, and the first EIS, to be entered into ETDM, the multiple parties involved were still in a state of familiarizing themselves with the process. Ultimately, the GCP was reviewed on two separate occasions through the ETDM Programming Screen; once with corridor variations that were carried over from the recommendations of the *Corridor Feasibility Study*; and then a second time with the addition of several more corridors.

In order to clearly present the results of the ETDM process for the project, the following paragraphs provide a summary of the project's two reviews through the ETDM programming screen, as well as elaborate on the changes in alternative corridor names that resulted from this.

ETDM Programming Screen Review 1

At the time the project was identified as an EIS, and it was subsequently determined that the project would be entered into ETDM, the direction provided was that the recommended corridor from the *Gulf Coast Parkway Corridor Feasibility Study* was to be reviewed in the Programming Screen. The *Corridor Feasibility Study* and the *Concept Master Plan* had resulted in a recommendation that Corridor B be carried forward into the Project Development and Environment (PD&E) study. This study, which had been initiated as a SEIR, had developed six options for Corridor B based on public concerns expressed about the crossing of Wetappo Creek and the presence of threatened and endangered species within the swales of Star Avenue. These six corridors were entered into the programming screen on February 28, 2006. On April 29, 2006, the Programming Screen review was completed and several Environmental Technical Advisory Team (ETAT) members identified a Dispute Resolution degree of effect for several resources areas.

On October 17, 2006, a meeting was held with the ETAT members, FDOT staff and FHWA to discuss the dispute resolution concerns. During this meeting, FHWA staff made the determination to "re-start" the ETDM Programming Screen with all of the corridors from the GCP Corridor Feasibility Study, the six variations of the recommended corridor that were carried into the PD&E study, as well as any corridors the ETAT members wished to submit for consideration. It was also decided during this meeting that the Purpose and Need statement for the project would be revised (based on agency input from the first Programming Screen review) and clarified. The revised Purpose and Need statement would be subject to FHWA review and approval.

ETDM Programming Screen Review 2

On November 16, 2006, the ETAT was notified of the availability of a two-week (10 business days) period in which alternative corridors could be submitted for consideration in the corridor review process. At the close of the period, eight new alternative corridors were submitted by the ETAT for evaluation. These were to be considered along with the four corridors analyzed during the GCP Corridor Study that were not previously carried forward into the first Programming Screen review, as well as the six corridors that were.

On January 25, 2007, FHWA concurred with the revised draft Purpose and Need Statement for the project. The 18 corridors were then submitted for consideration; 4 from the Corridor Feasibility Study, 6 from the previous Programming Screen, and 8 from the ETAT members. Based on a review of the revised Purpose and Need statement, FHWA determined that 12 of the possible 18 corridors sufficiently

met the project's Purpose and Need (met at least half of the criteria), and were to be carried forward into the second ETDM Programming Screen Review.

On January 30, 2007 correspondence was sent to the ETAT members informing them of this decision and allowing them a two-week (10 business days) period to comment or request a discussion with FHWA and FDOT regarding this decision. No response was received to these notifications.

On February 13, 2007 the second Programming Screen review was started with the 12 approved corridors. The review was completed on April 14, 2007, and again several ETAT members identified a Dispute Resolution degree of effect for several resources areas. However, through coordination with FDOT, FHWA, and the ETAT members, it was possible to reach a consensus on a methodology for resolution in the form of Issue Action Plans, which were discussed and agreed upon at a meeting on August 28, 2007.

Alternative Build Corridors Naming Conventions

In the GCP Corridor Feasibility Study, letters were used as the naming standard for distinguishing the alternative corridors. During this study, five alternative corridors, A through E, were evaluated, and of those five, the recommended corridor, Corridor B, was carried forward into the PD&E process. However, early in the PD&E study, public comments, as well as navigational concerns and the identification of sensitive natural systems to be avoided, resulted in the development of six overlapping variations of Corridor B. These six variations were submitted into the first Programming Screen review.

Since the Environmental Screening Tool (EST) would only accept numbers to be used for distinguishing the alternative corridors, the naming standard was changed and the six variations of Corridor B were numbered 1 to 6.

The decision to conduct a second Programming Screen Review with additional corridors resulted in additional name changes. The numbers 1 to 6 could not be used again since they were already developed for the first review. Additionally, the original corridors identified by letter in the Feasibility Study were required to have an assigned number. Therefore, Corridor A was re-named Corridor 7; Corridor B and its six overlapping variations from the previous ETDM review were re-named 8 through 13; Corridor C was re-named Corridor 14; and Corridor D was re-named Corridor 15. Corridors 16 through 18 were ETAT submitted corridors and only required the assignment of a corridor number.

Table 1-1 summarizes the evolution of the corridor naming. Section 2.1 of this document provides a description of each Corridor Alternative along with illustrations to showing each alternative corridor.

Table 1-1: Corridor Names

Project Stage	Study Team Developed Corridors										ETAT Developed Corridors		
											NWFWMD	USEPA	USFWS
Corridor Study	A	B						C	D	E	N/A	N/A	N/A
1st Programming Screen	N/A	1	2	3	4	5	6	N/A	N/A	N/A	N/A	N/A	N/A
2nd Programming Screen	7	8	9	10	11	12	13	14	15	Eliminated	16	17	18

2.0 Alternative Build Corridors

2.1 DESCRIPTION OF ALTERNATIVE BUILD CORRIDORS

The Alternative Build Corridors identified for evaluation in the ETDM Programming Screen for the EIS process are shown together on Figure 2-1, shown individually on Figure 2-2, and are described below.

Corridor 7 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 for approximately 5.2 miles. The corridor continues northwesterly on new alignment, bridging East Bay, and maintaining this direction until it intersects with SR 22; approximately 14.0 miles. From the intersection of SR 22, the corridor turns briefly to the west and heads again to the northwest along new alignment until it intersects with CR 2315 (Star Avenue). The corridor then travels north on existing Star Avenue to the intersection of US 231. The Corridor 7 length is 24.6 miles.

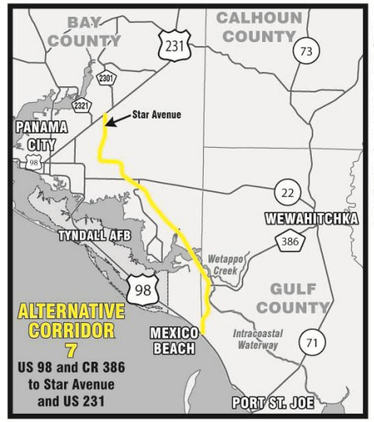
Corridor 8 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 for approximately 5.3 miles. From CR 386, the corridor travels north on new alignment, bridging over Wetappo Creek and the Intracoastal Waterway (ICWW) to the intersection with SR 22; approximately 10.4 miles. From SR 22, it travels west along the existing roadway for an approximate distance of 5.6 miles. The corridor then leaves existing SR 22 and travels northwest, and then west on new alignment until it meets CR 2315 (Star Avenue) near the roadway's existing intersection with Tram Road; approximately 5.0 miles. The corridor then travels north on existing Star Avenue for approximately 2.1 miles. There, the corridor turns west and travels along Nehi Road until it ends at US 231. The Corridor 8 length is 32.7 miles.

Corridor 9 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 for approximately 5.3 miles. It continues east along CR 386 and over the Overstreet Bridge for approximately 1.3 miles. From there, the corridor travels north on new alignment, bridging over Wetappo Creek and the ICWW and ending at SR 22; approximately 10.7 miles. At SR 22, it travels west along the existing roadway for an approximate distance of 5.6 miles where the corridor diverts from existing SR 22 and travels northwest, and then west on new alignment until it meets CR 2315 (Star Avenue) near the roadway's existing intersection with Tram Road; approximately 5.0 miles. At the intersection of Star Avenue, the corridor then travels north on existing Star Avenue for approximately 2.1 miles. There, the corridor turns west and travels along the path of the unpaved Nehi Road until it ends at US 231; approximately 2.2 miles. The Corridor 9 length is 33 miles.

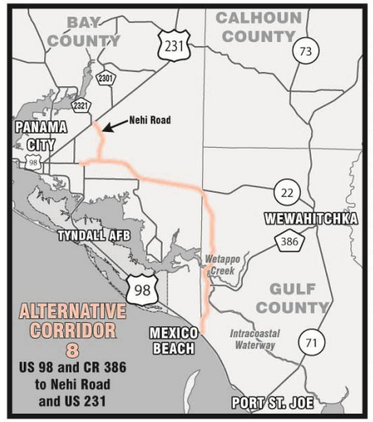
Corridor 10 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386; approximately 5.3 miles. It continues east along CR 386, over the Overstreet Bridge, and then north until the existing roadway heads east towards Wewahitchka; approximately 6.3 miles. From there, the corridor travels northwest on new alignment for approximately 4.6 miles and then turns north and travels on new alignment until the intersection with SR 22; approximately 5.1 miles. On SR 22, it travels west for an approximate distance of 5.6 miles where the corridor diverts from existing SR 22 and travels northwest and then west on new alignment until it meets CR 2315 (Star Avenue) near the roadway's existing intersection with Tram Road; approximately 5.0 miles. At the intersection of Star Avenue and Tram road, the corridor heads west along Tram Road to its intersection with US 98 in Springfield; approximately 2.1 miles. It then travels north on existing Star Avenue for approximately 2.1 miles. There the corridor turns west and travels along the path of the unpaved Nehi Road until it ends at US 231; approximately 2.2 miles. The Corridor 10 length is 38.3 miles.

Gulf Coast Parkway PD&E Study
Corridor Alternatives Evaluation Summary Report

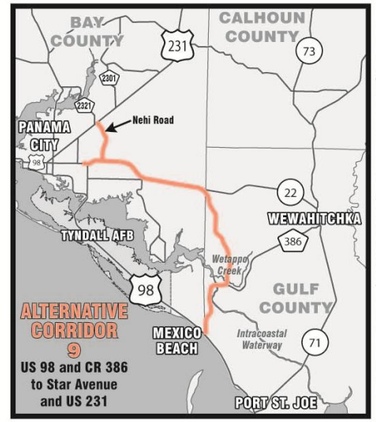
FIGURE 2-1: Alternative Build Corridors



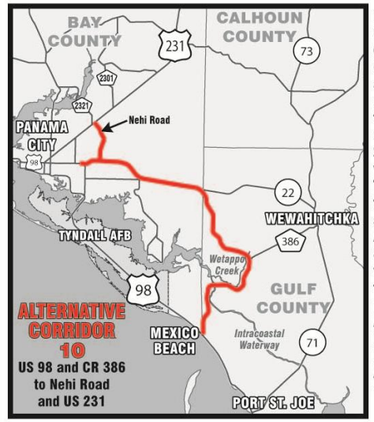
From US 98, travel CR 386 for 5.2 miles. Turn northwest on new alignment, crossing East Bay and Cooks Bay. Cross SR 22 and turn north and then west to Star Avenue (CR 2315). Follow Star Avenue to US 231. Alternative Corridor 7 is 24.6 miles long.



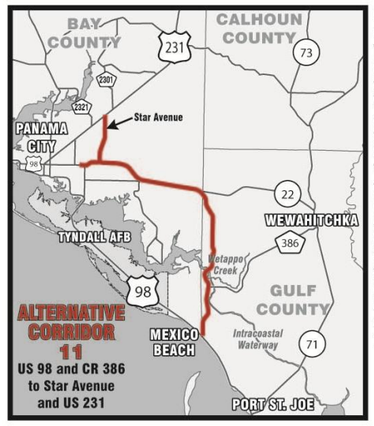
From US 98, travel CR 386 for 5.3 miles. Turn north on new alignment, crossing the Intracoastal Waterway (ICWW) and Wetappo Creek, to SR 22. Follow SR 22 west for 5.6 miles. Turn northwest and then west on new alignment to Star Avenue (CR 2315). Split at Star Avenue, following Tram Road to Tyndall Parkway (US 98) and Star Avenue to Nehi Road. Follow Nehi Road to US 231 and CR 2321. Alternative Corridor 8 is 32.7 miles long.



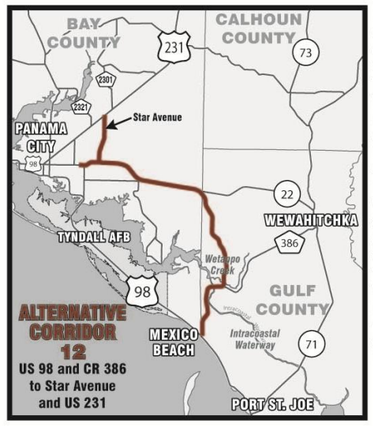
From US 98, travel CR 386 north, then east, across the Overstreet Bridge. Turn north across Wetappo Creek, then northwest on new alignment to SR 22. Follow SR 22 west for 5.6 miles. Turn northwest and then west on new alignment to Star Avenue (CR 2315). Split at Star Avenue, following Tram Road to Tyndall Parkway (US 98) and Star Avenue to Nehi Road. Follow Nehi Road to US 231 and CR 2321. Alternative Corridor 9 is 33 miles long.



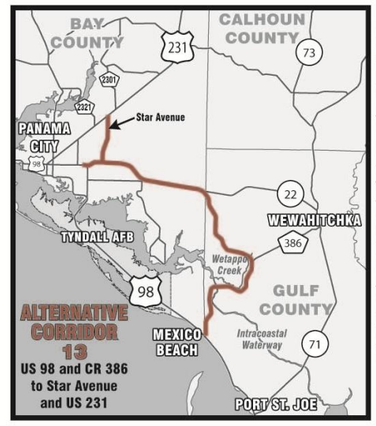
From US 98, travel CR 386 north, then east, across the Overstreet Bridge, and onwards for 6.3 miles. Turn west and then northwest on new alignment to SR 22. Follow SR 22 west for 5.6 miles. Turn northwest and then west on new alignment to Star Avenue (CR 2315). Split at Star Avenue, following Tram Road to Tyndall Parkway (US 98) and Star Avenue to Nehi Road. Follow Nehi Road to US 231 and CR 2321. Alternative Corridor 10 is 38.3 miles long.



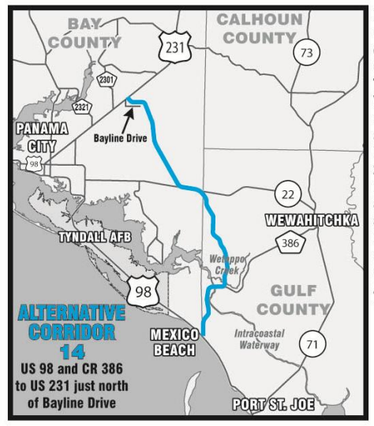
From US 98, travel CR 386 for 5.3 miles. Turn north on new alignment, crossing the Intracoastal Waterway (ICWW) and Wetappo Creek, to SR 22. Follow SR 22 west for 5.6 miles. Turn northwest and then west on new alignment to Star Avenue (CR 2315). Split at Star Avenue, following Tram Road to Tyndall Parkway (US 98) and Star Avenue to US 231. Alternative Corridor 11 is 33.3 miles long.



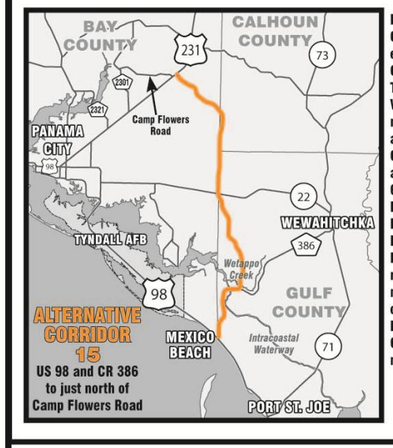
From US 98, travel CR 386 north, then east, across the Overstreet Bridge. Turn north across Wetappo Creek, then northwest on new alignment to SR 22. Follow SR 22 west for 5.6 miles. Turn northwest and then west on new alignment to Star Avenue (CR 2315). Split at Star Avenue, following Tram Road to Tyndall Parkway (US 98) and Star Avenue to US 231. Alternative Corridor 12 is 33.6 miles long.



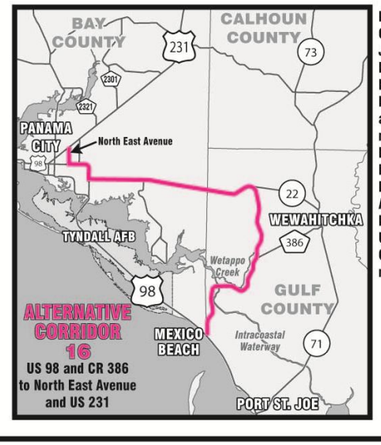
From US 98, travel CR 386 north, then east, across the Overstreet Bridge, and onwards for 6.3 miles. Turn west and then northwest on new alignment to SR 22. Follow SR 22 west for 5.6 miles. Turn northwest and then west on new alignment to Star Avenue (CR 2315). Split at Star Avenue, following Tram Road to Tyndall Parkway (US 98) and Star Avenue to US 231. Alternative Corridor 13 is 38.9 miles long.



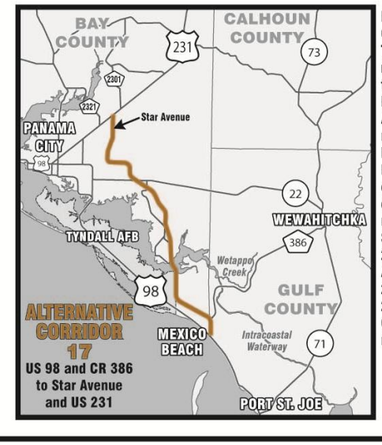
From US 98, travel CR 386 north, then east, across the Overstreet Bridge. Turn north across Wetappo Creek, then northwest on new alignment to SR 22. Follow SR 22 west for 2.0 miles. Turn northwest on new alignment for approximately 10.9 miles to US 231, north of the US 231 / CR 2301 intersection. Alternative Corridor 14 is 30.1 miles long.



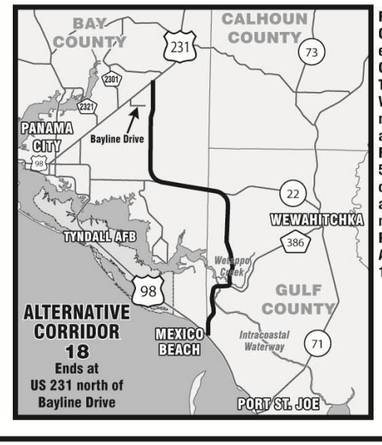
From US 98, travel CR 386 north, then east, across the Overstreet Bridge. Turn north across Wetappo Creek, then northwest on new alignment to SR 22. Cross SR 22 on new alignment north for 6.1 miles, to Homestead Road. Follow Homestead Road to Stone Road. Follow new alignment northwest for 2.1 miles to US 231 north of Camp Flowers Road. Alternative Corridor 15 is 31.7 miles long.



From US 98, travel CR 386 north to Jarrott Daniels Road. Follow Jarrott Daniels Road north to SR 22. Follow SR 22 west for approximately 16.5 miles to Tyndall Parkway (US 98). Follow Tyndall Parkway to East Avenue (CR 389). Follow East Avenue to US 231. Alternative Corridor 16 is 41.5 miles long.



From US 98, travel CR 386 for 1.6 miles. Turn northwest on mostly new alignment to the eastern boundary of Tyndall Air Force Base. Turn north, crossing East Bay, at Allanton Road. Turn northwest on new alignment, crossing SR 22, then north and west to Star Avenue (CR 2315). Follow Star Avenue north to US 231, north of CR 2321. Alternative Corridor 17 is 27.9 miles long.



From US 98, travel CR 386 north, then east, across the Overstreet Bridge. Turn north across Wetappo Creek, then north on new alignment to SR 22. Follow SR 22 west for 5.6 miles. Turn north on mostly new alignment for 11.3 miles to US 231 near Penny Road. Alternative Corridor 18 is 33.3 miles long.

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Figure 2-2: Individual Build Corridors

Corridor 11 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 approximately 5.3 miles. The corridor then travels north from CR 386 on new alignment, bridging over Wetappo Creek and the ICWW, and ends at an intersection with SR 22; approximately 10.4 miles. At the intersection of SR 22, it travels west along the existing roadway for an approximate distance of 5.6 miles. It then diverts from existing SR 22 and travels northwest and then west on new alignment until it meets CR 2315 (Star Avenue) near the roadway's existing intersection with Tram Road; approximately 5.0 miles. At the intersection of Star Avenue and Tram road, it heads west along Tram Road to its intersection with US 98 in Springfield; approximately 2.1 miles. The corridor then travels north on existing Star Avenue until it ends at US 231; approximately 4.9 miles. Corridor 11 has a length of 33.3 miles.

Corridor 12 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 approximately 5.3 miles. The corridor continues east along CR 386 and over the Overstreet Bridge for approximately 1.3 miles. From there, the corridor travels north on new alignment, bridging over Wetappo Creek and the ICWW and ending at SR 22; approximately 10.7 miles. Beginning at SR 22, it travels west along the existing roadway for an approximate distance of 5.6 miles. The corridor diverts from existing SR 22 and travels northwest and then west on new alignment until it meets CR 2315 (Star Avenue) near the roadway's existing intersection with Tram Road; approximately 5.0 miles. At the intersection of Star Avenue and Tram road, the corridor heads west along Tram Road to its intersection with US 98 in Springfield; approximately 2.1 miles. It travels north on existing Star Avenue until it ends at US 231; approximately 4.9 miles. Corridor 12 has a length of 33.6 miles.

Corridor 13 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 approximately 5.3 miles. It continues east along CR 386, over the Overstreet Bridge and then north until the existing roadway heads east towards Wewahitchka; approximately 6.3 miles. From there, the corridor travels northwest on new alignment for approximately 4.6 miles and then turns north and travels on new alignment until the intersection with SR 22; approximately 5.1 miles. At SR 22, it travels west along the existing roadway for an approximate distance of 5.6 miles. The corridor then diverts from existing SR 22 and travels northwest and then west on new alignment until it meets CR 2315 (Star Avenue) near the roadway's existing intersection with Tram Road; approximately 5.0 miles. At the intersection of Star Avenue and Tram road, it heads west along Tram Road to its intersection with US 98 in Springfield; approximately 2.1 miles. The corridor then travels north on existing Star Avenue until it ends at US 231; approximately 4.9 miles. The length of Corridor 13 is 38.9 miles.

Corridor 14 begins at the intersection of US 98 and CR 386 and then travels north along existing CR 386 for approximately 6.5 miles. The corridor continues north (and slightly northwest) on new alignment bridging over Wetappo Creek and extending on in this direction until it intersects with SR 22; approximately 10.7 miles. At SR 22, the corridor turns west and heads along the existing SR 22 for approximately 2.0 miles. The corridor again turns northwest on new alignment and continues approximately 10.9 miles until it terminus at US 231 near Miller Road. The Corridor 14 length is 30.1 miles.

Corridor 15 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 for approximately 6.5 miles. The corridor continues north (and slightly northwest) on new alignment bridging over Wetappo Creek and extending on in this direction until it intersects with SR 22; approximately 10.7 miles. From the intersection at SR 22, the alignment heads north, still on new alignment, for approximately 6.1 miles until it intersects Homestead Road. From there, the corridor travels along Homestead Road in a northwest direction 6.3 miles until the road ends at Stone Road. The corridor continues northwesterly along new alignment for approximately 2.1 miles to its terminus with US 231 near Camp Flowers Road. The Corridor 15 length is 31.7 miles.

Corridor 16 begins at the intersection of US 98 and CR 386 and travels north and east along existing CR 386, 11.9 miles, until the intersection with Jarrott Daniels Road. The corridor turns to the north and travels along Jarrott Daniels Road for 8.0 miles until it intersects with SR 22. At SR 22, the corridor travels west along the existing roadway into Panama City and to the intersection at US 98; approximately 16.5 miles. From there, the corridor travels north and west along existing US 98 for 3.4 miles until the intersection with East Avenue (Highway 389). The corridor turns north and heads along East Avenue for 1.8 miles until its terminus at US 231. The Corridor 16 length is 41.5 miles.

Corridor 17 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 for approximately 1.6 miles. The corridor then heads northwesterly on mostly new alignment for approximately 4.2 miles until it nears the eastern boundary of Tyndall AFB. The corridor then turns to the north, also on new alignment, bridges over East Bay at Allanton Road, and continues north (and slightly northwest) to an intersection with SR 22. This section of the corridor is approximately 13.6 miles long. At SR 22, the corridor turns west briefly before turning back to the northwest along new alignment until it intersects with CR 2315 (Star Avenue), approximately 3.6 miles north of SR 22. The corridor then travels north on existing Star Avenue to the intersection of US 231. The Corridor 17 length is 27.9 miles.

Corridor 18 begins at the intersection of US 98 and CR 386 and travels north along existing CR 386 for approximately 6.5 miles. The corridor continues north (and slightly northwest) on new alignment bridging over Wetappo Creek and extending on in this direction until it intersects with SR 22; approximately 9.9 miles. At SR 22, the corridor turns west and heads along the existing roadway for approximately 3.9 miles. The corridor again turns northwest on mostly new alignment and continues, approximately 11.3 miles, to its terminus at US 231 near Penny Road. The Corridor 18 length is 31.6 miles.

2.2 EVALUATION OF THE ALTERNATIVE BUILD CORRIDORS

This evaluation of the Alternative Build Corridors identified above is to determine which of the corridors will be identified for more detailed study during the Project Development and Environment (PD&E) phase.

The process for evaluating the Alternative Corridors is as follows:

Step 1: Identify those corridors that meet the project's Purpose and Need criteria.

Step 2: Evaluate the potential impacts of the corridors.

It is intended that at the conclusion of the evaluation effort, and in consultation with the FDOT, the FHWA, and the ETAT, those alternatives that meet the Purpose and Need, and which are reasonable, will be identified and studied in further detail as a part of the EIS.

2.2.1 Evaluation Criteria for the Project's Purpose and Need

Florida's ETDM Programming Screen includes development of the project Purpose and Need. On January 25, 2007, FHWA concurred with the Purpose and Need Statement for the project. As discussed in detail in Section 1.1 the Purpose and Need of the proposed GCP is to 1) enhance economic development in Gulf County through provision of direct access to major transportation facilities (regional freight transportation routes and intermodal facilities); improved mobility; and direct access to tourist destinations in south Gulf County; 2) improve mobility within the regional transportation network by providing a new connection to existing and future transportation routes consistent with the Bay County LRTP; 3) improve security of the Tyndall AFB by providing a shorter detour route, and 4) improve hurricane evacuation for residents of coastal Gulf County by providing an additional evacuation route.

The following criteria were developed as the means to verify an alternative corridor's ability to meet the project's Purpose and Need.

1. Reduce travel times for residents from southeast Bay and coastal Gulf counties to employment centers in Panama City.
2. Provide a more direct route between US 98 in Gulf County and freight transfer facilities on US 231 within Bay County.
3. Improve access between Gulf County Enterprise Zones along CR 386 and US 98 and the major freight transportation route out of Bay County, US 231.
4. Provide a direct route for tourists traveling US 231 to reach vacation and recreation opportunities in south Gulf County.
5. Provide a more direct route from south Gulf County to the Panama City International Airport (existing and proposed).
6. Increase traffic capacity of existing roadways; in particular, the currently congested sections of US 98 (Tyndall Parkway).
7. Improve security for the Tyndall AFB by providing an alternative route to US 98 through Tyndall.
8. Provide an alternative to existing emergency evacuation routes.
9 Is consistent with the adopted Bay County LRTP; and the adopted Bay County and proposed Gulf County Comprehensive Plans

All of the Alternative Build Corridors meet most of the Purpose and Need criteria to greater or lesser degrees. All of the alternative build corridors meet the following:

Criteria 3: Improve access between Gulf County Enterprise Zones along CR 386 and US 98 and the major freight transportation route out of Gulf County, US 231.

Criteria 6: Increase traffic capacity of existing roadways; in particular, the currently congested sections of US 98 (Tyndall Parkway).

Criteria 7: Improve the security for the Tyndall Air Force Base by providing an alternative route to US 98 through Tyndall.

Criteria 8: Provide an alternative to existing emergency evacuation routes. However, how well each alternative corridor met this criterion is determined by the location of its connection to US 231. The further north the alternative corridor's connection to US 231, the better the route was considered to perform.

All Alternative Build Corridors except for Alternative Corridor 16 meet **Criterion 6**: Increase traffic capacity of existing roadways; in particular, the currently congested sections of US 98 (Tyndall Parkway).

Alternative Corridor 16, which would utilize existing SR 22, US 98 (Tyndall Parkway) and East Avenue to reach US 231, adds traffic to US 98 (Tyndall Parkway) in Springfield. Since Alternative Corridor 16 utilizes existing roadways the build option of this corridor implies additional lanes of traffic would be added in order for this Corridor to meet Criterion 6. Alternative Corridor 16 is unique in this fashion as all other corridors provide capacity improvements to the existing roadway network by providing a new alterative route to assist with traffic demands. Corridor 16 would satisfy this criterion by actually adding additional capacity to the existing roadways.

Alternative Corridors 14, 15, 16, and 18 do not meet **Criterion 9**: Provide a connection to proposed regional transportation facilities consistent with the adopted Bay County LRTP. Should any of these corridors be identified for further evaluation this would remain a consideration to be addressed in the alternative alignments analysis phase. In order to compare if and how well the Alternative Build Corridors met the remaining Purpose and Need criteria, additional evaluation was conducted.

For a corridor alternative to meet Purpose and Need **Criteria 1, 2, 4, and 5**, it had to reduce travel times when compared to the existing corridor. The travel times for the proposed routes were calculated based on a travel speed of 60 miles per hour (mph) and free flow traffic conditions for the new roadway segments plus actual, field validated, travel times for corridor segments utilizing existing roads to reach a particular destination. For an alternative corridor to meet Purpose and Need **Criterion 7**, the distance traveled had to be less than the existing detour route.

2.2.1.1 PURPOSE AND NEED EVALUATION METHODOLOGY

The following section provides a brief discussion on the methodology used for evaluating each Purpose and Need Criteria.

Reduced Travel Times (Criteria 1, 2, 4, and 5): A description of the methods used to estimate travel times and distances is given in the following paragraphs. To determine whether a proposed corridor would meet the criteria of reducing travel times, the calculated travel time for the proposed corridor was compared to the actual travel time for the existing routes. The actual times were measured by traveling the existing routes during morning and afternoon peak-hour traffic times, using an accepted traffic engineering methodology.

Once the time to travel the existing routes was established these amounts were given a value of 1. Each proposed corridor's time to reach the respective destinations was then calculated as a percentage of the existing routes. Therefore a proposed corridor was assumed to meet the Purpose and Need Criteria if its travel time value was less than 1. The existing routes traveled were:

To Employment in Panama City:	From CR 386 west on US 98 through Tyndall AFB, across the DuPont Bridge to the intersection of US 98/CR 391/US 231/SR 75 (Harrison Avenue), then south on SR 75 to 11th Street.
To Intermodal Distribution Center:	From CR 386 west on US 98 through Tyndall AFB, across the DuPont Bridge to US 231, and along US 231 to the entrance to the Intermodal Distribution Center (freight transfer facilities) at Bayline Road.
To Existing Airport:	From CR 386 west on US 98 through Tyndall AFB, across the DuPont Bridge to SR 77, along SR 77 to Baldwin, and along Baldwin to the entrance to the airport.

To Proposed Airport:	From CR 386 west on US 98 through Tyndall AFB, across the DuPont Bridge to US 231, and along US 231 to CR 2321, along CR 2321 to SR 77, along SR 77 to CR 388, and then along CR 388 to the entrance to the proposed airport.
Tourist Route:	From the Bayline Road and US 231 intersection south to the intersection of US 231 and US 98, east on US 98 (15th Street/Tyndall Parkway), then south across the DuPont Bridge, through the Tyndall AFB to CR 386.

Again, the time to travel the proposed routes is shown as a percentage of 1. The routes selected for calculating the Alternative Corridor travel times are described as follows:

To Employment in Panama City: The intersection of 11th Street and SR 75 (Harrison Avenue) was selected as the destination for an employment center in Panama City based on it being approximately in the center, geographically, of the Central Business District. The route taken to this location was provided by traffic engineers who noted that traffic would follow US 98 to SR 75 (Harrison Avenue) to 11th Street, rather than travel from US 98 to 11th Street to SR 75 (Harrison Avenue). This assessment was made because much of 11th Street west of US 98 (Tyndall Parkway) is through a residential area with many cross streets.

Travel time to the SR 75 (Harrison Avenue)/ 11th Street intersection was calculated for the corridor alternatives based on the time it took to travel one of two routes:

> For Corridors 14 – 16, and 18, the route calculated traveled along the proposed corridor to SR 22, west along SR 22 to US 98, north then west along US 98 to the intersection of US 98/CR 391/US 231/SR 75 (Harrison Avenue), then south along SR 75 (Harrison Avenue) to 11th Street.
>
> Alternately for Corridors 7 – 13, and 17, the route calculated would proceed along the proposed corridor to Tram Road, then west on Tram Road to US 98, west on US 98 to the intersection of US 98/CR 391/US 231/SR 75 (Harrison Avenue), then south along SR 75 (Harrison Avenue) to 11th Street.

To the Intermodal Distribution Center: Travel time to the Intermodal Distribution Center (freight transfer facilities) was based on traveling the proposed corridor to US 231 and along US 231, to the entrance to the Intermodal Distribution Center, at Bayline Road.

To the Existing Airport: Travel time to the existing airport was based on traveling one of two routes:

> For Corridors 14 – 16, and 18, the route calculated traveled along the proposed corridor to SR 22, along SR 22 to US 98, along US 98 to SR 77, along SR 77 to Baldwin Road, and along Baldwin Road to the entrance to the airport;
>
> Alternately for Corridors 7 – 13, and 17, the route calculated would proceed along the proposed corridor to Tram Road, along Tram Road to US 98, along US 98 to SR 77, along SR 77 to Baldwin Road, and along Baldwin Road to the entrance of the airport.

To the Proposed Airport: Travel time to the proposed new airport was based on traveling the proposed corridor to its intersection with US 231 and from the proposed corridor's intersection with US 231 to CR

2321 and from CR 2321 to SR 77, along SR 77 to CR 388, and along CR 388 to the entrance to the proposed new airport.

Travel times for tourists were based on the time it would take to travel from the intersection of Bayline Road and US 231 to the intersection of CR 386 with US 98 on the proposed corridor.

Access to Enterprise Zones (Criterion 3): Enterprise zones in Gulf County have been designated along US 98 and CR 386. These are designated by the Office of Tourism, Trade, and Economic Development of the Executive Office of the Governor and are located in areas of the state where high poverty rates and little economic growth persist. All of the proposed corridors, except for Alternative Corridor 16, would improve the connection between the enterprise zones and US 231 by avoiding the congestion on Tyndall Parkway (US 98) and in Panama City. Alternative Corridor 16, which utilizes existing Tyndall Parkway (US 98), does not avoid the congestion, but would reduce the distance traveled. Travel times were not calculated because the enterprise zones were so large; however, for enterprise zones along CR 386, particularly in the vicinity of Overstreet, any of the corridors would be an improvement over the existing route.

Increased Traffic Capacity for US 98 (Criterion 6): Improved roadway capacity was based on an improved level-of-service on specific roadway segments as compared to the level-of-service on those segments under existing conditions. All Alternative Corridors except Alternative Corridor 16 would improve level-of-service on Tyndall Parkway (US 98) without adding additional travel lanes to the roadway. Since Alternative 16 travels along the existing Tyndall Parkway this would be accomplished by the addition of lanes as needed.

Reduce Distance Traveled (Criterion 7): Improving the security for Tyndall AFB was based on distance traveled. The existing route was measured based on the detour route which would need to be taken if US 98 through Tyndall Airforce Base was closed. This route would be US 98 to SR 71 into Wewahitchka; then along SR 22 west back to US 98 (Tyndall Parkway). As with the methodology for travel times, the existing detour route distance was then set to a value of 1, all of the proposed corridor distances were then measured as a percentage of the existing detour route. Those proposed corridors with a value less than one were therefore determined to provide an improvement and meet this Purpose and Need Criteria. The distance traveled was measured for the proposed corridors utilizing one of two routes:

> For Corridors 14 – 16, and 18, the route calculated traveled along the proposed corridor to SR 22, then along SR 22 to its intersection with US 98;
>
> Alternately for Corridors 7 – 13, and 17, the route calculated would proceed along the proposed corridor to Tram Road, then along Tram Road to its intersection with US 98.

All Alternative Corridors would improve the security of Tyndall Air Force Base.

Improved Emergency Evacuation Route (Criterion 8): Currently, evacuation out of coastal Gulf County is accomplished by traveling US 98 to SR 71, or US 98 to CR 386 to SR 71. In southeast Bay County, evacuees travel US 98 through Tyndall AFB, across the high-level DuPont Bridge, continuing north and west on US 98 to US 231.

While all alternative corridors would provide improved hurricane evacuation, the further north each proposed corridor's connection was with US 231 the better it was determined to improve emergency evacuation. This was determined since the further north along US 231 the connection, the less involvement would there be with the congestion on the segments of US 231 that were closer to Panama

City; and therefore the quicker evacuees are able to move away from the storm surge zones and coastal high hazard areas.

The corridor closest to Panama City and the farthest south along US 231 was Corridor 16; which was assigned the lowest value of 1. The corridor farthest away from Panama City and the farthest north along US 231 was Corridor 15; which was assigned the highest value of 12 (since there are 12 corridors).

Alternative Corridors 8, 9, and 10 received the same score (4) since they all connect to US 231 at the same location; and are about a quarter of the distance between Alternative Corridor 16 and 15.

Alternative Corridors 7, 11, 12, 13 and 17 received the same score (5) as they all connect to US 231 in the same location; which is slightly less than half the distance between Alternative Corridors 16 and 15.

Alternative Corridors 14 and 18 received scores of 8 and 10.

All corridor alternatives except Corridor Alternative 16 provide a new northbound route out of Gulf County.

Consistency with Approved Plans (Criterion 9): Providing connections consistent with the approved Bay County LRTP remains a purpose and need for the GCP. However at the corridor evaluation level this consideration is not factored into evaluation process. Instead it will be a consideration during the alternatives alignments analysis phase. Still another measure that fits into the plan consistency category and provides important comparative information during the corridor analysis phase is *improved network connectivity*.

Gulf County and eastern Bay County have a limited number of through roads with few provisions for alternative transportation. Good connectivity maximizes the efficiency of the transportation network, facilitating local and regional circulation. Good circulation and access to intermodal facilities are necessary elements of a viable freight transportation system. The connection to freight transfer facilities and to the existing and future airports addresses the intermodal aspects of network connectivity.

To measure *improved network connectivity*, the number of connections the proposed corridor would have to existing regional facilities was counted. The more new connections to existing arterial roads provided by an alternative corridor, the greater the network connectivity and the potential for improvement in traffic circulation.

2.2.1.2 PURPOSE AND NEED EVALUATION RESULTS

Table 2-1 summarizes the Purpose and Need Criteria evaluation. The purple shading indicates where a corridor was determined to meet the Purpose and Need Criteria. Although all of the alternative corridors meet *most* of the Purpose and Need criteria, only Alternative Corridors 7, 8, 11, and 17 meet *all* the criteria.

Table 2-1: Alternative Corridor Compliance with Selected Purpose and Need Criteria

Corridors	Reduce Travel Times to Employment in Panama City	Provide More Direct Route to Freight Transfer Facilities	Improve Access to Enterprise Zones in Gulf County	Provide Direct Route for Tourists to Coastal Gulf County	More Direct Route to Airport		Increase Traffic Capacity of Existing Tyndall Parkway	Improve Security of Tyndall AFB by Providing Alternate Route	Emergency Evacuation Route		New Connections to Network Roadways
					To Existing Airport	To Future Airport					
Criteria	**1**	**2**	**3**	**4**	**5**		**6**	**7**	**8**		**9**
Existing Route	1.00	1.00	No	1.00	1.00	1.00	No	1.00	No	0	None
– Alt. 7	**0.88**	**0.67**	**Yes**	**0.67**	**0.64**	**0.75**	**Yes**	**0.57**	**Yes**	**5.27**	**4**
– Alt. 8	**0.95**	**0.83**	**Yes**	**0.83**	**0.71**	**0.84**	**Yes**	**0.63**	**Yes**	**3.79**	**4**
– Alt. 9	1.00	**0.85**	**Yes**	**0.85**	**0.73**	**0.84**	**Yes**	**0.65**	**Yes**	**3.79**	**4**
– Alt. 10	1.10	**0.94**	**Yes**	**0.94**	**0.82**	**0.91**	**Yes**	**0.74**	**Yes**	**3.79**	**4**
– Alt. 11	**0.95**	**0.80**	**Yes**	**0.80**	**0.71**	**0.79**	**Yes**	**0.63**	**Yes**	**5.27**	**4**
– Alt. 12	1.00	**0.83**	**Yes**	**0.83**	**0.73**	**0.84**	**Yes**	**0.65**	**Yes**	**5.27**	**4**
– Alt. 13	1.10	**0.91**	**Yes**	**0.91**	**0.82**	**0.93**	**Yes**	**0.74**	**Yes**	**5.27**	**4**
– Alt. 14	1.02	**0.67**	**Yes**	**0.67**	**0.76**	**0.84**	**Yes**	**0.63**	**Yes**	**8.15**	**3**
– Alt. 15	1.02	**0.78**	**Yes**	**0.78**	**0.76**	**0.91**	**Yes**	**0.63**	**Yes**	**12.45**	**3**
– Alt. 16	1.38	1.09	**Yes**	1.09	**0.89**	**0.99**	Yes	**0.78**	**Yes**	**1**	**2**
– Alt. 17	**0.88**	**0.67**	**Yes**	**0.67**	**0.64**	**0.76**	**Yes**	**0.54**	**Yes**	**5.27**	**4**
– Alt. 18	1.02	**0.78**	**Yes**	**0.78**	**0.76**	**0.91**	**Yes**	**0.65**	**Yes**	**10.82**	**2**

For those Criteria assessed by travel time or distance the time or distance of the existing route was set to equal one; therefore a proposed corridor met these criteria whenever their travel time or distance was less than the existing route (i.e., less than one).

2.2.2 Alternative Build Corridors Potential Impacts

For this level of analysis, each Alternative Corridor's impacts on the socioeconomic, natural and physical environment have been determined by a desktop review of a variety of GIS data. A Cultural Resources probability assessment with an accompanying windshield survey of the moderate and high probability areas was also completed. A technical memorandum of the Cultural Resources Probability Assessment has been completed as a part of this effort.

Table 2-2 is a matrix of the alternative corridors' involvement with natural systems. The natural systems of concern include: Special Flood Hazard Areas; Wetlands; Florida Land Use and Land Cover Classification System (FLUCCS); Florida Natural Areas Inventory (FNAI) Threatened and Endangered Species Elemental Occurrences.

2.2.2.1 ALTERNATIVE BUILD CORRIDORS POTENTIAL IMPACTS METHODOLOGY

Except for Species Elemental Occurrence data, an alternative corridor's involvement with these systems has been calculated as the amount of acreage of the natural system falling within the corridor limits. Species Elemental Occurrence data are the number of reported occurrences of threatened or endangered species that fall within the limits of the alternative corridor. The estimate of impacts is based on an 800-foot wide corridor in rural areas and a 400-foot wide corridor in urban areas. It should be noted that actual impacts will be based on a 250-foot wide right-of-way rather than corridor widths provided below. Further, because of the corridor width, it will be possible to adjust an alignment within the corridor to avoid some if not all of the known occurrences.

Table 2-2: Summary of Alternative Build Corridors Natural Impacts

Corridor	Total Corridor Area (in acres)*	Special Flood Hazard Areas		Wildlife & Habitat			Wetlands			
		Special Flood Hazard Areas (in acres)	Flood Areas as % of total area	FNAI Threatened and Endangered Species Elemental Occurrence Data**	Pristine Lands In FLUCCS (in acres)***	Pristine Lands as a % of total area	Palustrine (in acres)	Estuarine (in acres)	Total Wetlands (in acres)	Total Wetlands as a % of total area
7	2466	732	29.7	7	420	17.0	878	164	1042	42.3
8	2912	1069	36.7	15	390	13.0	950	48	998	34.3
9	2890	1211	41.9	16	395	13.0	950	48	998	34.6
10	3451	1577	45.7	20	483	14.0	959	15	974	28.3
11	2904	1085	37.4	18	371	13.0	975	48	1023	35.3
12	3088	1227	39.7	19	412	13.0	881	29	910	29.5
13	3464	1593	46.0	23	523	15.0	983	15	995	28.8
14	2930	1213	41.4	7	361	12.0	981	29	1010	34.5
15	2968	1263	42.5	4	202	7.0	843	29	872	29.4
16	3584	1257	35.1	30	785	22.0	869	22	891	24.9
17	2463	529	21.5	9	468	19.0	1361	101	1462	59.4
18	3221	1391	43.2	13	392	12.0	921	29	950	29.5

* Impacts are based on an 800-foot wide corridor in rural areas and a 400-foot wide corridor in urban areas. Actual impacts will be based on a 250-foot wide right-of-way width.

** FNAI Elemental Occurrence Data - The FNAI database maintains an Elemental Occurrence File that includes a single location of the habitat. FNAI defines an Elemental Occurrence (EO) as "a single existing habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element". These elemental occurrences are based on elements of a uncommon component in the standard

environment. Examples of these elements can be described as species, natural communities, and other ecological features such as springs and sinkholes.

*** Florida Land Use Land Cover Classification - The FLUCCS is a hierarchical system that groups similar types of land uses, vegetation, and land forms into different levels of categorization, each level containing information of increasing specificity. Categories found in the Alternative Corridors include: 2100 (cropland and pastureland) 3200 (shrub and brushland), 3220 (coastal scrub), 4100 (upland coniferous forests), 4340 (hardwood – coniferous mixed), 6100, (wetland hardwood forests) 6210 (cypress), 6300 (wetland forested mixed), 6410 (freshwater marshes), 6310 (wetland shrub), and 7100 (beaches other than swimming beaches).

Table 2-3 summarizes each corridor's potential to impact the social and cultural environment. For purposes of this comparison, social impacts were confined to impacts to residential and business properties as no community facilities would be impacted. Similar to the Elemental Occurrence data, social and cultural impacts are estimated by calculating the number of each parcel type, or Archeological and Historic sites that fall within the limits of the alternative corridor.

Archaeological and Historic Sites: A Cultural Resources Corridor Probability Assessment analysis was completed for this evaluation according to the methodology established by FDOT, FHWA, and the State Historic Preservation Officer. Project archeologists reviewed previous cultural resource assessments and physiographic variables. The corridors were then subjected to a reconnaissance-level assessment to verify and refine the high probability areas and preliminarily evaluate any cultural resources encountered.

A predictive model was developed using information regarding previously recorded sites and surveys obtained from the Florida Master Site File (FMSF) coupled with physiographic variables (relative elevation, distance to fresh water, and soil types) in western Gulf and eastern Bay counties. Areas where the soils were at least somewhat poorly to moderately well-drained along sand ridges, and those areas along or near substantial fresh water bodies were considered to be high/moderate probability (shown in the Probability Assessment Technical Memorandum). Areas that are frequently inundated or consist of wetland vegetation species, as well as areas that are not located within close vicinity to fresh water were considered to have a low potential for the presence of cultural material and therefore, have been determined to be low probability.

Field methods for this reconnaissance-level assessment consisted of a windshield survey and visual inspection of the project corridors. Notes were taken on elevation, soils conditions and any other pertinent information. Photographs of these areas were also taken during this assessment and are included in the technical memorandum.

Table 2-3: Summary of Alternative Build Corridors Social Impacts

Corridor	Property Types Within Corridors			Archaeological or Historic Sites
	Residential Parcels	Business Parcels	Agriculture Parcels	
7	64	8	85	10
8	48	9	108	9
9	48	10	45	9
10	48	10	134	9
11	63	15	67	9
12	63	16	119	9
13	63	16	103	9
14	49	3	79	12
15	50	3	75	9
16	250	150	68	11
17	63	8	68	4
18	47	3	95	9

Impacts are based on an 800-foot wide corridor in rural areas and a 400-foot wide corridor in urban areas. Actual impacts resulting from a 250 foot right-of-way width, which could be shifted within the corridor to minimize impacts, would be less.

2.2.3 Alternative Build Corridors Estimated Costs

Costs of Build Corridor Alternatives were calculated by totaling the right-of-way and construction cost estimates. Construction cost estimates were based on an average per-unit lane-mile cost. The estimated costs of each Alternative Corridor are summarized in Table 2-4.

Table 2-4: Summary of Costs for Alternative Build Corridors (in millions)

Alternatives	Right-of-Way Costs	Construction Costs			Total Estimated Costs
		Roadway Cost	Low Level Bridge Cost	High Level Bridge Cost	
7	$32.52	$217.80	$11.55	$130.00	$391.87
8	$35.35	$269.68	$15.73	$54.89	$375.65
9	$34.56	$271.29	$18.19	$83.73	$407.77
10	$42.24	$302.43	$24.47	$24.84	$393.98
11	$41.80	$275.25	$15.73	$54.89	$387.67
12	$42.29	$276.86	$18.19	$83.73	$421.07
13	$50.73	$308.00	$24.47	$28.84	$412.04
14	$38.11	$241.47	$12.61	$83.73	$375.92
15	$23.94	$250.94	$11.03	$83.73	$369.64
16	$77.42	$322.41	$41.10	$24.84	$465.77
17	$64.05	$234.36	$7.92	$54.88	$361.21
18	$23.77	$261.26	$18.63	$83.73	$387.39

Once the data was collected and summarized it was provided to the public for their input at Corridor Assessment Workshops. The input gathered from these workshops along with the project's public involvement process to date can be found in the following section; Section 3. The analysis and results of the data found in this section is provided in Section 4.

3.0 Public Involvement and Coordination

The public involvement and agency coordination to date has occurred in two stages: (1) during the Corridor Feasibility Study, and (2) since the initiation of the SEIR and EIS. The following summarizes this effort to date.

3.1 CORRIDOR FEASIBILITY STUDY

An Advance Notification (AN) was distributed on May 14, 2002, upon initiation of the GCP Corridor Feasibility Study in accordance with the requirements of Part 1, Chapter 8, of the FDOT *Project Development and Environment Manual*. This was followed by local government kick-off meetings for the Panama City – Bay County Metropolitan Planning Organization (MPO [now Transportation Planning Organization, or TPO]), the Bay County Commission, the Gulf County Commission, the Calhoun County Commission, and the city councils for Callaway, Parker, and Mexico Beach.

Three newsletters were distributed during the study to approximately 3000 people in Gulf and Bay counties and the communities of Springfield, Mexico Beach, and Callaway. The first, published in November 2002, described the study area, the corridor feasibility study process, and provided names with contact information. The second newsletter, distributed in February 2003, summarized the progress on the study and provided information about the forthcoming corridor workshops. The final newsletter was submitted at the conclusion of the corridor feasibility study to inform the public of the study findings and the next steps in the project development process.

Three corridor workshops, held during March 2003, were conducted in accordance with the guidance in the FDOT *Project Development and Environment Manual* and the requirements of Florida Statute 339.155. A total of 102 people attended the three workshops. Eight formal comments were made during the meetings.

- One asked how the economic benefits had been determined.
- One objected to Alternative Corridor 7 (at the time known as Corridor A in the Corridor Feasibility Study) on environmental grounds.
- Two favored improving existing roads.
- One urged a regional approach to the planning study.
- One asked for clarification on whether the proposed project was to be a four-lane facility.
- One asked how much of the property along the right-of-way was owned by the St. Joe Company.

Twelve written comments were received during the comment period.

- Eight comments were in favor of the project, four specified Alternative Corridor 15 (Corridor D in the Corridor Feasibility Study) as a preferred corridor.
- One opposed Corridor E (no longer under consideration but was east of Alternative 9 and connected to US 231 just south of Youngstown, FL).
- One supported the multi-use trail.
- One expressed support for widening existing SR 71.
- One supported a tri-county planning process instead of a new road.

Numerous comments supporting the project were made to staff during the open-house portion of the workshop.

In addition, resolutions supporting the project were received from the Callaway City Commission (Resolution #03-04, dated February 17, 2003), the City of Panama City (Resolution #022503-1, dated February 25, 2003), the Springfield City Commission (Resolution #03-02, dated February 24, 2003), and the Panama City Urbanized Area MPO (Resolution #03-06, dated April 28, 2003), which recommended Corridors A (Alternative 7) or B (Alternatives 9 or 12).

Tyndall AFB also submitted a letter indicating that the project would benefit security at the base by providing a suitable alternative route for the public. The AFB indicated this would significantly upgrade its force protection posture and the safety and security of its personnel and resources, as well as enhance its ability to execute its mission in heightened threat conditions.

3.2 STATE ENVIRONMENTAL IMPACT REPORT

At the initiation of the SEIR study, prior to when federal funds were appropriated for the project, an AN for the project was distributed to the Florida State Clearinghouse - Florida Department of Environmental Protection/OIP and other interested federal, state, regional, and local agencies on August 24, 2005. Also, a series of kick-off meetings were held with local government officials, the public, and regulatory agencies. A list of the kick-off meetings and the dates they were conducted are provided in Table 3-1.

Table 3-1: Gulf Coast Parkway PD&E Study Kick-off Meetings

Group	Date of Meeting
Bay County TPO CAC	8/24/05
Bay County TPO Board	8/24/05
Bay County TPO TCC	8/24/05
Bay County Commission	9/06/05
Gulf County Commission	9/13/05
Parker City Council	9/21/05
Callaway City Council	9/27/05
Springfield City Council	10/03/05
Mexico Beach City Council	10/11/05
Cedar Grove City Council	10/25/05
Gulf County Public	11/28/05
Regulatory Agencies	11/29/05
Bay County Public	11/29/05

Both public kick-off meetings provided an opportunity for the public to review exhibits, obtain hand-outs, and ask questions before the project presentation. The presentation included a description of the prior studies and selection of the proposed corridor, an explanation of the study to be conducted and the schedule for completion, and an explanation on how to obtain additional information. Following the presentation, the project team remained to answer any questions. A lengthy discussion was held with a few members of the public following the presentation providing more detail on the project, the project development process, and the funding situation. Overall, the public was favorable to the project.

A total of five comment sheets were returned during the formal comment period.

- Three comments favored the western route across the Intercoastal Waterway (ICWW) and Wetappo Creek.
- One asked why the alignment was not utilizing Jarrott Daniels Road (an unpaved road) and indicated a preference for any of the corridors from the corridor study but the one selected.
- One asked how the new road would tie to US 98.

Federal funds were appropriated for the project on August 10, 2005, necessitating preparation of an EIS. The subsequent enactment of SAFETEA-LU required the project be entered into the FDOT ETDM system because a Notice of Intent to conduct an EIS had not been issued prior to August 15, 2005. As a result of the ETDM process, the following coordination has occurred with the agencies.

Another agency kick-off meeting was held March 8, 2006, in the vicinity of the proposed project. This meeting was attended by the United States Fish and Wildlife Service (USFWS), the United States Army Corps of Engineers (USACE), the United States Environmental Protection Agency (USEPA), the Florida Fish and Wildlife Conservation Commission (FFWCC), the Florida Department of Environmental Protection (FDEP), and the Northwest Florida Water Management District (NWFWMD).

The ETAT field review of the proposed corridor was conducted April 5 and 6, 2006. This field review was convened to assist ETAT members in reviewing first-hand the various ecosystems that potentially would be encountered by an alignment within the proposed Corridor B (Alternatives 9 or 12).

Following the field reviews, the ETAT members submitted comments through the ETDM Programming Screen. Among the criteria evaluated were several that some of the agencies ranked as having Dispute Resolution in the Degree of Effect. A meeting to discuss the Dispute Resolution findings was conducted at the FDOT Central Office in Tallahassee, Florida, on October 17, 2006. Representatives of the ETAT, as well as FHWA, FDOT Central Environmental Management Office (CEMO), and FDOT - District Three attended. Members of the ETAT in attendance included USFWS, USACE, USEPA, FDEP, FFWCC, NWFWMD, and the Florida Department of Community Affairs (FDCA).

Additional coordination that has occurred to date includes:

- A meeting with USACE was held on March 27, 2007, in Jacksonville, Florida, to brief the new project contact on the project. The agency's ETDM comments and Degree of Effect findings were also discussed.

- A meeting with USFWS was held on April 5, 2007, in Panama City, Florida, to discuss their ETDM comments and Degree of Effect findings.

- A meeting with NWFWMD was held on April 9, 2007, in Midway, Florida, to discuss their ETDM comments and Degree of Effect findings.

- An additional field review was conducted on May 1, 2007, with USFWS staff. The field review was convened to examine recently included corridors being analyzed in the ETDM system.

3.3 CORRIDOR ASSESSMENT WORKSHOP

Two Alternative Corridors Public Meetings were held to provide information to the public about the corridors being considered for the Gulf Coast Parkway and to obtain public input regarding the corridors under consideration. Notification of the meetings was published in the Port St. Joe Star on August 7, 2008 and in the Panama City News Herald on July 31, August 3, August 4, and August 10, 2008.

The Alternative Corridors Public Workshop in Gulf County was held on August 12, 2008 at the Centennial Building (2201 Centennial Drive) in the city of Port St. Joe. Approximately 109 people attended. The meeting was comprised of an "open house" format, allowing the public to view aerial photography, maps, and comparative data of the study area and the proposed corridors. FDOT representatives and the study consultant were also available to answer questions and discuss the project. After the "open house" period, a formal presentation was delivered followed by a question/comment

period. During the meeting, a public opinion survey was made available which could be filled out and submitted at the meeting or taken home and submitted by mail at a later date. A public comment sheet was also provided along with a handout to each attendee for them to read over information about the project and leave a written comment. Additionally, a court reporter was available at the meeting for any individuals who wished to leave a public comment in this manner.

An Alternative Corridors Public Workshop was also held in Bay County on August 21, 2008 at the Springfield Community Center (3728 E. 3rd Street) in the city of Springfield. Approximately 124 people attended. The purpose and format of the meeting was identical to the meeting held in Gulf County, as was the information presented. Again, a public opinion survey, public comment sheet accompanying a meeting handout, and a court reporter were made available to all attendees.

In addition to the meetings on August 12 and 21, the project website (www.gulfcoastparkway.com) also provided a means for the public to view and/or download all of the material that was presented at the meetings, including the presentation. The public opinion survey and comment forms were also available on the project website where both could be filled out online and submitted or downloaded and returned by mail.

Following the meetings, a public comment period in which the comment forms and public opinion surveys could be returned was held open until August 31, 2008.

3.4 PUBLIC OPINION QUESTIONNAIRE

The public opinion surveys were mailed to all property owners within 500 feet of any of the proposed corridors in addition to the distribution at the Alternative Corridors Public Workshop and those downloadable from the project website. The information obtained from the return of the surveys will be used along with technical information to identify which corridors may be carried forward for development and analysis of conceptual roadway alignments. **A total of 259 questionnaires were returned.** It is important to note that within the survey were several questions which allowed for multiple answers, (for example the last question asks, "please identify your top 3 alternative corridors") therefore during the analysis of the survey data it should be noted that more than 259 votes were registered for certain criteria.

3.4.1 Response Rate

A total of 1,403 surveys were mailed out to property owners within a 500-foot buffer from any of the 12 proposed corridors. Also, as previously mentioned, the survey was available at both Corridor Assessment Workshops and on-line. Of the 259 returned questionnaires 200 were returned by mail, 53 were handed in at the workshops, and 6 were submitted on-line. The surveys returned by mail provided a 14.2% response rate of representative sample of 1,403 surveys mailed out. 38% of the questionnaires were returned from property owners in Gulf County, 48% from Bay County, and 15% came from another county or did not list their county. In order for any submitted survey to be counted in the results, the responder's home address had to be included, however more than one property owner from the same property could submit a survey.

3.4.2 Conclusions

Two clear conclusions could be drawn from the questionnaires returned. First was that Corridor 7 and 17 were the most preferred corridors based on the total number of times they were selected. Corridor 7 was selected 117 times and Corridor 17 was selected 101 times. The next most selected corridor was Corridor 15 with 79 votes followed by Corridor 8 with 55 votes.

Second, based on the number of comments received, the most direct (shortest) route was the most important criteria to responders. Other criteria cited as reasons for their selections included: congestion relief/avoidance, hurricane/emergency evacuation, versatility or having the choice to choose between two northern termini (at Tyndall Parkway and US 231), access (between population centers; to west Bay County; closer to shopping and doctors; tourist access, etc.), minimization of environmental impacts, use of existing roads and/or bridges, relocations or property impacts, economic reasons, and cost. There were also 29 votes for the No Build. A copy of the survey along with an analysis of the public survey responses is provided in **Appendix A**.

4.0 Corridor Evaluation Summary

The next step in the project's development is to identify those corridors in which road alignments will not be developed for detailed analysis, and conversely those which will. All of the alternative corridors meet the criteria within each evaluation category (purpose and need, environmental involvement, and total cost) with varying degrees of success. While a particular alternative corridor may be less effective in meeting one criterion, say wetlands impacts for example, it may be successful meeting another criterion, such as residential parcel impacts, therefore making a clear determination of which corridors should be carried forward for detailed analysis a complex evaluation process.

This process is discussed in detail in the following subsections.

4.1 METHODOLOGY

Each alternative corridor's performance in meeting *purpose and need*, minimizing environmental involvement, and least *total costs* was calculated based on actual quantitative data, as reported in Section 2 of this report. Each corridor was assigned a performance (for purpose and need) or involvement (for environment and costs) rank from 1 to 12 based on how it compared to that of the other eleven corridors (with the corridor having the best performance or lowest involvement receiving a score of 1 and the worst performance or highest involvement receiving a score of 12). Each corridor received a total of three evaluation category ranks (*purpose and need*, *environmental involvement*, and *total cost*) which were then totaled to obtain an overall performance/involvement score. The corridors were then ranked based on the overall score, from 1 to 12.

There are three evaluation categories: *purpose and need*, *environmental involvement*, and *total cost*. Within the *purpose and need* category there are eight performance criteria by which each corridor was evaluated. Within the *environmental involvement* category there are eight involvement criteria by which each corridor was evaluated. In the *total cost* category there is only one criterion by which the corridors were evaluated.

Therefore, in order to ensure that an equal weight was given to each of the three evaluation categories the following procedure was used. Each corridor was first assessed an overall Category Score, and then ranked 1 through 12, to provide a Category Rank. Once this was completed, each corridor's Category Ranks were added up to provide an Overall Score. The corridors with the best scores will be identified for further analysis.

For example, Corridor 7 was evaluated as such:

> **Step 1:** Evaluated for performance within each of the eight *purpose and need* criteria, and then added up across the columns so that a Purpose and Need Performance Score was calculated (Table 4-1, final column Category Score = 17; Purpose and Need Performance Rank = 2)
>
> **Step 2:** Evaluated for involvement within each of the eight *environmental involvement* criteria, and then added up across the columns so that an Environmental Involvement Score was calculated (Table 4-2, final column Category Score = 48; Environmental Involvement Rank = 8)
>
> **Step 3:** Evaluated for *total cost*. Again, this category had only one criterion and was obtained by ranking the corridors from lowest to highest estimated cost. (Table 4-3, Total Cost Rank = 7)

Step 4: The final step in the evaluation was to add up each of the Category Ranks so that an Overall Score could be calculated. (Table 4-4, total score = 2 + 8 + 7 for an Overall Score of 17, Overall Rank = 5)

The corridors which had the lowest Overall Scores were determined to measure best.

4.1.1 Determination of Criterion Rankings, Category Scores and Category Rankings

Below is a summary of how the corridors were evaluated within each of the *purpose and need, environmental involvement*, and *total cost* categories, and then combined to provide an overall score and ranking.

There are eight criteria under the *purpose and need* category, eight criteria under the *environmental involvement* category, and one criterion under the *total cost* category. Each corridor has previously been evaluated in Section 2 of this report and that data has been carried over into column 1 of 2 under each criterion in tables 4-1, 4-2, and 4-3.

A criterion rank (highlighted gray in column 2 of 2 under each criterion) has been assigned based on how each corridor compared to the other corridors in the same criterion. Since there are 12 alternative corridors, a particular corridor's criterion rank ranges from 1 to 12; unless the corridor fails to meet a particular criterion entirely, in which case the value is always 12 (the worst rank).

Once a corridor has been assigned a rank for each of the criteria within the categories those ranks are totaled (numbers in the highlighted gray columns added together) to determine each corridor's Category Score. In the case of the *total cost* category no totaling is required as there is only the one criterion by which the corridors were ranked. After the 12 alternative corridors have had their Category Scores calculated, the corridors are assigned a Category Rank to determine each corridor's overall rank within the *purpose and need, environmental involvement,* and *total cost* categories.

The corridor that has the best category score is ranked 1st, and the corridor with the worst category score is ranked 12th.

Rankings under the *total cost* category are based on the corridors' value within a single criterion. In the total cost evaluation category, the corridor ranked 1st is the corridor with the least cost.

Finally, in table 4-4 each alternative corridor's *purpose and need*, *environmental involvement,* and *total cost* category rankings were combined to obtain an Overall Score for each of the alternative corridors. The Overall Score was then ranked to determine the best overall alternative corridors.

4.2 RESULTS

Table 4-1 illustrates the comparative evaluation by corridor and provides the category scores and rankings for *purpose and need*. **Table 4-2** illustrates the comparative evaluation by corridor and provides the category scores and rankings for *environmental involvement*. **Table 4-3** illustrates the comparative evaluation by corridor and provides the category scores and rankings for *total cost*.

Table 4-1: Purpose and Need Performance Category Ranking

Alternative Build Corridors	Reduce Travel Times to Employment in Panama City		Provide More Direct Route to Freight Transfer Facilities		Provide Direct Route for Tourists to Coastal Gulf County		Improve Travel Time to Existing Airport		Improve Travel Time to Future Airport		Improve Security of Tyndall AFB by providing a shorter Alternate Route		Hurricane/ Emergency Evacuation Connection to US 231		New Connections to Network Roadways		Purpose & Need Category Score	Purpose & Need Category Rank
	%	Criterion Rank	%	Criterion Rank	%	Criterion Rank	%	Criterion Rank	%	Criterion Rank	%	Criterion Rank	Miles	Criterion Rank	#	Criterion Rank		
7	0.88	1	0.67	1	0.67	1	0.64	1	0.75	1	0.57	3	5.27	8	4	1	17	2
8	0.95	6	0.83	7	0.83	7	0.71	3	0.84	4	0.63	5	3.79	9	4	1	42	5
9	1	12	0.85	9	0.85	9	0.73	5	0.84	4	0.65	7	3.79	9	4	1	56	9
10	1.1	12	0.94	11	0.94	11	0.82	9	0.91	8	0.74	9	3.79	9	4	1	70	10
11	0.95	6	0.8	5	0.8	5	0.71	3	0.79	3	0.63	5	5.27	8	4	1	36	3
12	1	12	0.83	7	0.83	7	0.73	5	0.84	4	0.65	7	5.27	8	4	1	51	8
13	1.1	12	0.91	10	0.91	10	0.82	9	0.93	11	0.74	9	5.27	8	4	1	70	10
14	1.02	12	0.67	1	0.67	1	0.76	7	0.84	4	0.63	5	8.15	5	3	5	40	4
15	1.02	12	0.78	4	0.78	4	0.76	7	0.91	8	0.63	5	12.45	1	3	5	46	6
16	1.38	12	1.09	12	1.09	12	0.89	11	0.99	12	0.78	11	0	12	2	9	91	12
17	0.88	1	0.67	1	0.67	1	0.64	1	0.76	2	0.54	1	5.27	8	4	1	16	1
18	1.02	12	0.78	4	0.78	4	0.76	7	0.91	8	0.65	7	10.82	2	3	5	49	7

* Each criterion has two columns, the first column is from Table 2-1 and the second column is the assigned rank.

Table 4-2: Environmental Involvement Category Ranking

Alternative Build Corridors	Flood Hazard Areas % of total area		FNAI Threatened or Endangered Species Elemental Occurrence Data		Pristine Lands as % of total area		Wetlands as % of total area		Residential Parcels		Business Parcels		Archaeological or Historic Sites		Environmental Involvement Total Category Score	Environmental Performance Rank**
	%	Criterion Rank	# Occurrences	Criterion Rank	%	Criterion Rank	%	Criterion Rank	#	Criterion Rank	#	Criterion Rank	#	Criterion Rank		
7	29.7	2	7	2	17	10	42.3	11	64	11	8	4	10	8	48	8
8	36.7	4	15	6	13	4	34.3	7	48	2	9	6	9	6	35	3
9	41.9	8	16	7	13	4	34.6	9	48	2	10	7	9	6	43	5
10	45.7	11	20	10	14	8	28.3	2	48	2	10	7	9	6	46	7
11	37.4	5	18	8	13	4	35.3	10	63	10	15	9	9	6	52	10
12	39.7	6	19	9	13	4	29.5	5	63	10	16	10	9	6	50	9
13	46	12	23	11	15	9	28.8	3	63	10	16	10	9	6	61	11
14	41.4	7	7	2	12	2	34.5	8	49	3	3	1	12	12	35	3
15	42.5	9	4	1	7	1	29.4	4	50	4	3	1	9	6	26	1
16	35.1	3	30	12	22	12	24.9	1	250	12	150	12	11	10	62	12
17	21.5	1	9	4	19	11	59.4	12	63	10	8	4	4	2	44	6
18	43.2	10	13	5	12	2	29.5	5	47	1	3	1	9	6	30	2

* Each criterion has two columns, the first column is from Table 2-2 or 2-3, the second column is the assigned rank

** Alternative Corridors 8 and 14 finished with identical overall scores and therefore share the 3rd Environmental Performance Rank.

Table 4-3: Total Cost Category Ranking

Alternative Build Corridors	Total Cost Millions of Dollars	
	Cost	Criterion Rank
7	$392	7
8	$376	3
9	$408	9
10	$394	8
11	$388	6
12	$421	11
13	$412	10
14	$376	3
15	$370	2
16	$466	12
17	$361	1
18	$387	5

* Each criterion has two columns, the first column is from Table 2-4 and the second column is the assigned rank

As can be seen from Tables 4-1 through 4-3 the amount of information to be evaluated for each corridor is significant. Because there is so much information within each table to compare, analyze, and factor against the results from the other categories it becomes clear why it is necessary to combine the information into overall category scores.

While it is important to consider each corridor's involvement at the criterion level within each category (and will be discussed on this basis to some extent in the following sections), determining an overall assessment from this perspective is not possible. Therefore, as previously mentioned, to ensure equal consideration was given to each category the category ranks were added together to determine an overall score. This effort was completed as shown in **Table 4-4** which summarizes the results and provides each corridor's overall score and rank.

Table 4-4: Overall Score and Ranking

Alternative Build Corridors	Purpose and Need Performance Rank		Environmental Involvement Rank		Total Cost Rank		Overall Score	Overall Rank
	Category Score	Rank	Category Score	Rank	Category Score	Score		
7	17	2	48	8	$392	7	17	5
8	42	5	35	3	$376	3	11	2
9	56	9	43	5	$408	9	23	8
10	70	10	46	7	$394	8	25	9
11	36	3	52	10	$388	6	19	7
12	51	8	50	9	$421	11	28	10
13	70	10	61	11	$412	10	31	11
14	40	4	35	3	$376	3	10	3
15	46	6	26	1	$370	2	9	4
16	91	12	62	12	$466	12	36	12
17	16	1	44	6	$361	1	8	1
18	49	7	30	2	$387	5	14	6

4.3 CORRIDORS NOT IDENTIFIED FOR FURTHER STUDY

When the overall scores and rankings of the corridors are examined, the results can be clustered into tiers. The top four corridors (Corridors 17, 15, 14, and 8) have overall scores of 8, 9, 10, and 11. There is a gap between these and the rankings in the second tier, which consists of Corridor 18, 7, and 11 with scores of 14, 17 and 19. The third tier is comprised of Corridors 9, 10, and 12 with rankings of 23, 25, and 28. The fourth and final tier includes Corridors 13 and 16 which have rankings of 31 and 36. This is also illustrated in **Table 4-5.**

Table 4-5: Corridor Overall Ranking Tiers

Tiers	Alternative Build Corridors	Overall Score
1	17	8
	15	9
	14	10
	8	11
2	18	14
	7	17
	11	19
3	9	23
	10	25
	12	28
4	13	31
	16	36

Below is a brief discussion of each corridor that is not identified for further study starting with the corridor which earned the worst overall ranking. It may be helpful to reference Figure 2-2 during this discussion as it illustrates each of the project corridors individually.

Corridor 16 ranked as the worst corridor in the purpose and need and total cost categories, it was also the second worst ranked corridor in the environmental involvement category. In particular the corridor provides the least benefit to hurricane evacuation, is the longest route, and has by far the most potential for residential and business impacts. Corridor 16 also had the greatest potential for endangered species impacts (though this is largely a function of being comprised of existing roadways where the likelihood for a reported endangered species sighting is increased).

Corridor 13 ranked as the worst corridor in the environmental involvement category and was the least selected corridor by the public. Further it was ranked second worst in the purpose and need category (tied with Corridor 10) and is the third most expensive corridor. Corridor 13 had the greatest potential for flood plain impacts and had the second greatest potential for endangered species impacts.

Corridor 12, 10, and 9 are similar in location to Corridor 13 (as well as Corridors 8 and 11) and each of these corridors performed poorly for each criterion throughout the three categories. The identification of these corridors to not be carried forward is as much a function of their poor overall comparative performance as it is that there are extremely similar but better options in Corridors 8 and 11. Also of note is that Corridors 10, 12, and 9 were respectively the second, third, and fourth least selected corridors by the public.

Corridor 11 is identical in location to Corridor 8 with the exception of a small two-mile segment at its northern terminus. The difference between these termini is what affects this corridor's comparison as it creates a noticeable separation in the environmental involvement category scores. Corridor 11 ties for the 10 worst ranking corridor under the residential parcels criterion, and is 9th worst for potential business parcel impacts. It is also of note that there were several comments submitted in writing; as a part of the survey; or spoken at the public meetings which expressed a very distinct preference for the Nehi Road terminus over the Star Avenue terminus should any of Corridors 8 through 13 be identified for further analysis.

Corridor 7 is not identified for further analysis. While this corridor performed well in the purpose and need category, it was in the middle range by comparison in the environmental involvement and total cost categories. Another important distinction about Corridor 7 is that it was identified through the ETDM Programming Screen review as the corridor with the most Dispute Resolution degree of effects (a total of 9). Further, while this corridor was identified the most by the public it is possible that this was largely a function of it being the shortest route, particularly since Corridor 17 was the next most selected corridor

and is the next shortest route. It is possible to derive from this information that the public's primary concern is the length of the route and perhaps not the exact location of Corridor 7.

Corridor 18 is very similar in location to Corridor 14 and as such the comparison across the categories between these two corridors is quite similar. However it measures noticeably worse in its potential for flood plain impacts (10th worst) and also measures slightly worse across almost all the purpose and need criteria.

4.4 CORRIDORS RECOMMENDED FOR FURTHER STUDY

The next step in the project's development is to select corridors in which road alignments will be developed for detailed analysis.

It is the final recommendation to advance the first tier corridors which represent the top four overall scores. Corridor 17 (ranked 1st with an overall performance score of 8); Corridor 15 (ranked 2nd with an overall score of 9); and Corridors 14 and 8 (ranked 3rd and 4th with overall scores of 10 and 11); these along with the No Build Alternative would then be identified to be carried forward for detailed analysis.

4.5 REASONABILITY

Upon completion of the corridor evaluation effort, and in consultation with the FDOT, the FHWA, and the ETAT, those alternatives that have met Purpose and Need and which are *reasonable*, will be identified to be studied in further detail as a part of the EIS.

Defining and/or defending the reasonability of a corridor is an elusive goal. Since the study area is so large, and because of the many disparate concerns within the area, providing a generally acceptable assessment of a corridor's reasonability is difficult. However, if the determination is considered from a prospective of the corridor's ability to best represent the project's unique concerns and challenges, then a determination of reasonability becomes a more achievable goal.

In this manner we can group the corridors based on the purposes they serve best.

- Corridors **7** and **17** both represent corridors which provide the shortest possible route, a criterion which, through the Corridor Assessment Workshops and Public Opinion Questionnaire, was most selected by the public as a primary concern.

- Corridors **8 through 13** are very similar in location with the exception of how they travel around Wetappo Creek and terminate near US 231 and Star Avenue. Also the Wetappo Creek and Star Avenue regions of the study area have been of significant concern to the citizens (for Wetappo Creek) and the resource agencies (for the Panama City Crayfish concerns around Star Avenue).

- Corridors **14** and **18** represent corridors which provide a middle ground between the shortest possible route and the most direct hurricane evacuation benefit. Further Corridors 14 and 18 (along with Corridor 15) were identified by the public as the best possible routes for relieving congestion; which was the second most selected concern by the public. Corridors 14 and 18 also represent direct connections to the Intermodal Distribution Center.

- Corridor **15** represents the corridor which provides the most direct hurricane evacuation benefit. Hurricane Evacuation was the third most selected concern by the public.

- Corridor **16** represents the corridor which makes best use of existing roadways (either paved or dirt road).

Through these groupings we can see that while there are several different alternatives, many of them overlap in the purposes they best serve. The intent of the PD&E process is to analyze a project study area and determine those solutions which best serve the purpose of the project while also avoiding and minimizing social and natural environmental impacts to the greatest possible extent.

With the corridors grouped based on the purpose served we can then see that the top tier corridors from the evaluation effort contain a representative corridor in four of the five categories. As such it can be reasonably determined that those corridors which performed best in the evaluation effort therefore represent the best corridor from their different categories. Therefore:

- **Corridor 17** most reasonably represents the corridor which best serves to provide the shortest possible route. Corridor 17 was also the second most selected route by the public.

- **Corridor 14** most reasonably represents the corridor which best serves to provide a direct connection to the Intermodal Distribution Center, and was perceived by the public to best serve to relieve traffic congestion. Corridor 14 was also the most selected by the public from its category (and was 5th overall).

- **Corridor 15** was the only corridor in the category to provide the most direct hurricane evacuation benefit. As it scored in the top tier, and was the 3rd most selected corridor by the public it is reasonable that this corridor be included.

- **Corridor 8** most reasonably represents the corridor which best serves from the corridors that varied only in location around Wetappo Creek and Star Avenue. Corridor 8 was also the most selected alignment of these alternatives by the public (and was 4th overall).

It is concluded that Corridors 17, 15, 14, and 8 which represent the top tier of corridors based on a quantitative analysis comparing Purpose and Need performance, potential environmental impacts, and total costs; and which also represent the best corridors from each of the differing purpose groups are the most reasonable alternative corridors to be identified for further analysis in the EIS study.

The four corridors identified for further analysis are shown together on **Figure 4-1**.

Gulf Coast Parkway PD&E Study
Corridor Alternatives Evaluation Summary Report

FIGURE 4-1: Corridors Identified For Further Analysis

APPENDIX A
PUBLIC OPINION SURVEY SUMMARY

GULF COAST PARKWAY
PUBLIC OPINION SURVEY

August 2008

www.gulfcoastparkway.com

FPID No.: 410981-1-22-01

The Florida Department of Transportation (FDOT) is conducting a Project Development & Environment (PD&E) Study for a proposed new roadway (the Gulf Coast Parkway) that would connect US 98 in Gulf County with US 231 and US 98 (Tyndall Parkway) in Bay County. To ensure that FDOT understands your concerns, please complete the following survey. Providing information through this survey does not represent your endorsement of the project. All surveys must be mailed by August 31, 2008. Thank you for your participation.

To ensure the validity of this survey please provide your name and address below. This contact information will only be used by project staff to update our project mailing list.

Name: _____ **Address:** _____

City: _____ **State:** _____ **Zip Code:** _____

E-mail (optional): _____

PLEASE PRINT OR CIRCLE YOUR RESPONSE

In which county do you live: *Gulf* *Bay* *Other:* _____

How far do you commute to work (one-way)? *1-20 miles* *21-30 miles* *30+ miles*

How far do you commute to shopping? *1-20 miles* *21-30 miles* *30+ miles*

On average, how often each month do you travel to Gulf / Bay County? *Less than 5 trips* *5-10 trips* *10+ trips*

Would you travel to Gulf / Bay County more often if there was a more direct route? *Yes* *No*

If you own a business, do you think the proposed project would be good or bad for your business?

Good for my business *Bad for my business* *Don't know*

If you traveled any of the alternative corridors north from US 98 to US 231, where would you most likely be headed? *To Panama City* *North of Panama City* *Other*

Overall, are you in favor of this project? *Yes* *No* *Undecided*

From the list below, circle your three most important issues regarding the project.

- Roadway Congestion
- Traffic Noise
- Roadway Safety
- Hurricane / Emergency
- Potential Bridges
- Residential / Business Relocations
- Economic Improvement
- Waterway Navigation
- Wetlands
- Environment
- Wildlife and Habitat
- Induced Growth
- Construction Schedule
- Opportunities for Input on the Project
- Project Costs
- Other (please specify): _____

How would you prefer to get information on the Gulf Coast Parkway PD&E Study in the future:

Public Meetings | Mailings and Newsletters | Small Group Meetings

Talking directly with a Project Team Member | Web Page (www.gulfcoastparkway.com)

Please choose your top 3 alternative corridors:

7 8 9 10 11 12 13 14 15 16 17 18 None

Why do you consider these 3 corridors the best choices? _____

_____

_____

Thank you!

Please fold your survey on the dotted line on the back, seal with the enclosed sticker, and place in the mail.

The responses to the Gulf Coast Parkway Corridor Questionnaire have been analyzed. Two conclusions can be drawn from the responses received. First, is that Corridors 7 and 17 are the most preferred corridors, based on the number of times they were selected. Second, based on the number of comments received, the most direct (shortest) route was of most importance to the responders.

Before presenting the findings, some limitations should be noted.

While many cited most direct or shortest as their reason for the corridors they selected, the corridor that was shortest for one was not necessarily the shortest for another.

Not everyone provided reasons for their selections. Also, not all comments were clear. No attempt was made to assume what was intended, even if a reason appeared obvious.

Many responses did not indicate an order of preference for the corridors selected. Therefore, unless the respondent indicated a preference, all selected corridors were considered equal.

Where multiple reasons were given and no indication was provided as to which reason applied to which corridor, all the selected corridors were included in each category named. Therefore, it is possible that some corridors have been included in a particular reason category that the respondent did not actually intend to be applied to that category.

It was obvious from some comments that the figures were not of sufficient detail to enable the responder to make adequate evaluations. For instance, a corridor may be selected because it was thought that it did not require a new bridge, but in actuality would require a new bridge.

Responses were grouped into common categories. When a category included multiple related but different reasons, the comments are grouped into subcategories. The number of selections, over 1, received applicable to a particular category, or subcategory, are noted in parenthesis.

Summary of responses by category

Economic:

13 questionnaires cited economic reasons for the selection of a corridor or corridors. Within the Economic category there are six subcategories: Development, Tourism, Commerce, Local Benefit, and General.

Two responders suggested development possibilities as a reason for their selections. Corridors selected were: 14 (2), 15, 16, 17, and 18.

Three responders cited tourism benefits. Corridors selected were: 7, 11, 14, 15(2), 17, and 18.

Two responders cited commercial benefits. In both cases they indicated travel to Panama City. Corridors selected were 7, 12, 13, 14, 17, and 18

Three responders identified local benefits of the project. One responder identified Corridor 16 as providing service to the county. Another identified Corridors 13, 16, and 18 as benefiting Wewahitchka, and the third thought both Corridors 16 and 17 would economically benefit SR 22.

Three responders offered general comments regarding improving economics. Corridors selected were 11, 12, 13, 16, and 17.Corridor 16 was thought to improve the economy while 4-laning SR 22.

All corridors nominated with number of times in parenthesis are:

7(2), 11(2), 12(2), 13(3), 14 (4), 15(3), 16(5), 17(5), 18(4)

Corridors 16 and 17 were selected the most often, followed by **Corridors 14 and 18.** Corridors 13 and 15 was selected the third most frequently and 7, 11, and 12 least.

Cost

There were 24 responders who cited costs in their reasons for selecting corridors. Assumptions supporting the selection of particular corridors as being cost effective include: shortest distance would be less expensive, lower bridge costs, and use of existing roads and bridges would reduce costs. In some cases, the selection of particular corridors is based on it meeting more than one concern, such as closest to Mexico Beach and cost effective.

Corridors selected based on cost effectiveness include: 7(16), 8(4), 9(2), 10, 11, 12, 13(2), 14(5), 15(9), 16(2), 17(13), and 18.

Since Corridors 8 and 11, 9 and 12, 10 and 13 are the same except for their connection to US 231, there votes were combined giving the following totals: 7(16), 8(5), 9(3), 10(3), 14(5), 15(9), 16(2), 17(13), and 18(1).

Corridors 7 (16), 17 (13), and 15 (9) were selected most often.

Environment

There were 18 responders who cited the affect on the environment as supporting their selection of corridors. Reasons behind the selections include: no or limited impact on Wetappo Creek and use of existing roads and bridges to reduce impacts. In some cases, it was a combination of low impact and some other reason, such as cost or how short the route was.

Corridors identified based on perceived impact to the environment include: 7(9), 8(3), 10(2), 11(2), 12(3), 13(3), 14, 15(3), 16(3), and 17(13). **Corridors 17 and 7** were the most often identified as having the least impact on environment.

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(9), 8(3), 9(3), 10(5), 14, 15(3), 16(3) and 17(13).

Use of Existing Bridges/Roadways

There were 20 responses commenting on the use of existing roadways or bridges. Fifteen of the responses selected corridors. The remaining five suggested following CR 386 across the Overstreet bridge and taking the first unpaved road on the left. Except for the lack of alignment north of SR 22 these suggested alignments are the similar to Corridor 16. Therefore, Corridor 16 was assigned as the selection for those responses.

Corridors selected include: 8(3), 9(4), 10(4), 11(5), 12(7), 13(4), 14, 15, 16(8), and 18(3).

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 8(8), 9(11), 10(5), 14(1), 15(1), 16(8) and 18(3).

Corridor 16 would be the most frequently selected corridor if the five responders who did not select a corridor are included. Corridor 16 is considered to make the best use of existing roads. However, as one commenter noted, even though 16 makes the best use of existing roads, he would never use it because it was too long.

After Corridor 16, Corridor 12 was the most frequently selected because it used the existing Overstreet Bridge. However, if Corridors 12 and 9 are combined then Corridor 9 becomes the most selected even when the five incomplete corridors are added to Corridor 16.

Congestion Relief

There were 24 responses dealing with congestion relief. Different corridors were selected for addressing congestion relief in different areas. Among the specific areas needing congestion relief cited are: US 98 (Tyndall Parkway), Panama City, SR 22, and Star Avenue at US 231. Corridors selected that were thought to provide congestion relief include: 7(3), 8(5), 9(8), 10(4), 11(3), 12(1), 14(13), 15(12), 16(3), 17(4), 18(11).

Corridors 8, 9, 10 used Nehi and avoid congestion at Star Avenue and US 231 and also avoid congestion on US 98 (Tyndall Parkway). Corridors 14, 15, and 18 were also selected to avoid congestion on US 98 (Tyndall Parkway) and at the intersection of Star Avenue and US 231.

Corridors 7 and 17 were selected to ease congestion on SR 22 and avoid congestion on US 98 (Tyndall Parkway) and NE Panama City. Corridor 16 was selected because it widens SR 22 to 4-lanes and thereby relieves congestion through increased capacity.

The most popular corridors for relieving/avoiding congestion were **14, 15, and 18.**

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(3), 8(8), 9(9), 10(4), 14(13), 15(12), 16(3), 17(4), and 18(11).

Hurricane/Emergency Evacuation

Thirteen responders cited hurricane/emergency evacuation as a reason for selecting their corridor(s). One responder stated that there was no good evacuation route because of limited capacity on US 231 and recommended using SR 71. Corridors selected include: 7(2), 8, 9, 10, 11(2), 13, 14(6), 15(5), 16(2), 17(3), 18(3), none (use SR 71).

One responder replied specifically to evacuating from the Overstreet area, selecting Corridors 8, 9, and 10. Most, however, selected the corridors that would take them the furthest north (**14 and 15**, followed by **17 and 18**).

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(2), 8(3), 9(1), 10(2), 14(6), 15(5), 16(2), 17(3) and 18(3).

Access to North

Twenty responders identified access further north as important. Corridors selected include: 7, 10, 13, 14(13), 15(18), 16, 17, and 18(12). One responder recommended that the connection to US 231 should be in the vicinity of Youngstown.

To go north, corridors 14, 15 and 18 were most selected.

Versatility

Responders who liked the dual northern termini (US 98 via Tram Road and US 231) or who like corridors with easy access to other parts of Bay County, such as the International Airport or West Bay via CR 2321 were grouped into the Versatility category. Corridors selected based on the ability to connect to US 98 and go north include: 7(5), 8(9), 9(8), 10(3), 11(11), 12(4), 13(2), 16, 17(7), and 18. Corridor 11, was selected most often when the goal was to provide to access to both Panama City and the north. These were followed by Corridors 8, 9 and 17.

Corridors providing access to other parts of Bay County include: 7(3), 8(2), 9(2), 10, 17(3) and 18. Corridors 7 and 17 were seen as equally proficient in providing a connection to CR 2321 to reach other routes to go to the new airport, West Bay and Southport.

Corridor totals are: 7(8), 8(11), 9(10), 10(4), 11(11), 12(4), 13(2), 16(1), 17(10), and 18(2).

Most versatile corridors are **11 (11), 8 (11), 9 (10), and 17 (10**).

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(8), 8(22), 9(14), 10(6), 16(1), 17(10), and 18(2).

Access to or Between Places

Twenty-eight questionnaires were returned citing access-related reasons as the basis for the selection of the identified corridors.

Those who wanted to travel to Panama City selected Corridors: 7(13), 8(4), 9, 11(2), 12, 13, 14, 16(3), and 17(9).

Those who wanted to travel to Mexico Beach selected Corridors: 7(4), 8(2), 9, 11(2), 12, 15(2), and 17(5).

Four responders chose routes between Panama City and Mexico Beach. Corridors: 7, 8, 10, 13(2), 15, 16, 17(2).

One responder felt a connection to CR 390 would be of more value to travelers. Selected corridors were: 8, 9, and 10.

Another responder selected Corridors 7, 10 and 17 as providing easier access to his properties another selected 7, 13, and 15 as being more in the direction he traveled.

Corridor totals are: 7(20), 8(10), 9(3), 10(2), 11(4), 12(2), 13(4), 14(1), 15(4), 16(4), and 17(17).

Corridors 7(20) and 17 (17) were most frequently selected as providing access.

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(20), 8(12), 9(5), 10(6), 14(1), 15(4), 16(4), and 17(17).

Corridor 8 becomes a viable second Tier selection.

Most Direct

Selected corridors include: 7(58), 8(18), 9(5), 10, 11(14), 12(5), 13(3), 14(8), 15(13), 16(2), 17(48), and 18(4). Corridors 7 and 17 most selected.

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(58), 8(32), 9(10), 10(4), 14(8), 15(13), 16(2), 17(48), and 18(4).

Property Impacts/ Relocations

Five questionnaires identified property impacts and/or relocations as the reason for the selection of corridors. Corridors selected include: 7, 11(2), 12, 13, 14, 15(4), 16(3), 17(2), and 18.

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(1), 8(2), 9(1), 10(1), 14(1), 15(4), 16(3), 17(2), and 18(1).

Corridor 15 (4) was the most frequently identified corridor for minimizing property impacts, followed by 16(3), 11(2) and 17(2).

Personal Reasons

Twenty-three respondents gave personal reasons as the basis for the selection of corridors. Some selected corridors to avoid their homes and land, others wanted the project to pass by their business, some hoped their property value would increase, others selected corridors that would be more convenient for them or would increase their property values.

Nine respondents chose corridors that avoided their property. Corridors selected included: 7(5), 8(7), 9(2), 11, 15, 16, 17(3), and 18(3). One respondent was concerned whether the intersection of CR 386 and US 98, which is common to all corridors, would impact their property.

Some of those who responded also indicated which corridors would adversely affect them. These corridors include: 7, 9, 10, 12, 13, 15, 16, 17, and 18.

Those who responded that the selected corridor would pass near or improve access to their business selected corridors 7(2), 9, 12, 14(2), 15(2), 16(2), 17(2).

Those who responded that the selected corridors would increase property values selected corridors 7(2), 16, 17(3).

Those who responded that the selected corridors were close to their home/property or access to their home/property would improve selected corridors 7(3), 10(3), 15, 16(3).

Corridors selected include: 7(12), 8(7), 9(4), 10(3), 11, 12(2), 14(3), 15(3), 16(7), 17(8), and 18(3). **Corridors 7 (12) and 17 (8) were selected the most often, followed by 8 (7) and 16 (7).**

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(12), 8(8), 9(6), 10(3), 14(3), 15(3), 16(7), 17(8), and 18(3).

Corridor 7(12) is still most selected, but corridors 17(8) and 8(8) become equal, followed by 16(7).

Tyndall Bypass

Tyndall Bypass was given consideration by four respondents. Corridors selected include: 7(2), 8, 9, 11(2), 12, 16, and 17(2).

Combining 8 and 11, 9 and 12, 10 and 13 gives the following totals: 7(2), 8(3), 9(2), 16(1), 17(2).

Corridors 7(2), 11 (2), and 17 (2) were identified equally as much. However, when 8 and 11 are combined Corridor 8 becomes the most chosen.

Safety

One respondent identified safety as one of several reasons for the selection of his chosen corridor. The only corridor selected was 17.

APPENDIX B
ETAT COMMENT AND RESPONSES

Memo

To: Gulf Coast Parkway PD&E Environmental Technical Advisory Team

From: Florida Department of Transportation

Date: March 31, 2009

Re: Gulf Coast Parkway Corridor Alternatives Evaluation Summary Report Review

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Gulf Coast Parkway Project Development an Environment Study: Corridor Alternatives Evaluation Summary Report

The Gulf Coast Parkway Project Development an Environment (PD&E) study has recently completed a Corridor Alternatives Evaluation Summary Report (CAESR) of the 12 alternative corridors that were reviewed by the Environmental Technical Advisory Team (ETAT) through the Efficient Transportation Decision Making (ETDM) Programming Screen.

The purpose of the document was to summarize the Purpose and Need of the project, describe the alternative corridors under consideration, and then to analyze these corridors using a comprehensive and comparative assessment of each corridor's performance in meeting Purpose and Need, potential for social and environmental impacts, and estimated costs. Input from the public through meetings and a survey, along with ETAT feedback through their Programming Screen reviews were also used to support the findings of the assessment.

The Florida Department of Transportation (FDOT) submitted the CAESR report to the Federal Highway Administration (FHWA) for their review and approval of both the document's methodology and conclusions. On March 19th, 2009 FHWA provided this approval and this letter has been included for informational purposes.

At this time a Cultural Resources Corridor Level Probability Assessment and Review is being completed as the final step for data collection to supplement the completed and approved CAESR report. As mentioned in previous correspondence, **the CAESR is being submitted to the ETAT for review and comment**. **Comments submitted from the ETAT will be collected and included as an appendix to the Final CAESR** which will be published in the Environmental Screening Tool (EST), on the project website (www.gulfcoastparkway.com), and summarized in the PD&E study documents.

All comments must be received by 04/29/2009 (20 business days) in order to be included in the Final CAESR. A teleconference meeting will be offered on 04/15/2009 at 2:00 pm EST to provide an opportunity for ETAT members to ask any questions or share discussion prior to the comment submittal date.

The teleconference call in number is: **877-807-4005**
The passcode is: **8501801**

A follow up email will be sent out again announcing the teleconference date, time, and phone numbers.

If you have any questions you may contact the following people:

Greg Garrett
Senior Planner
PBS&J
Phone: 850 580-7825
Email: gwgarrett@pbsj.com

Alan Vann
Project Manager
FDOT District Three
Environmental Management Office
Phone: (850) 415-9523
Email: Alan.Vann@dot.state.fl.us

Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
(727) 824-5317; FAX 824-5300

April 28, 2009 F/SER46:DR/mt

Mr. Alan Vann
Project Manager
Florida Department of Transportation District Three
Environmental Management Office
1074 Highway 90 East
Chipley, Florida 32428-2162

Subject: Gulf Coast Parkway PD&E Study
Corridor Alternatives Evaluation Summary Report
FPID#: 410981-1-14-01
Gulf County and Bay County, Florida

Dear Mr. Vann:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the Gulf Coast Parkway Corridor Alternatives Evaluation Summary Report referenced above. NMFS provides the following comments on the report and the analysis used to select corridor alternatives for further consideration or elimination. The analysis used to assess the 12 potential corridors (Alternative Build Corridors # 7-18) is based on ranking each alternative on three evaluation categories ("purpose and need", "environmental involvement", and "total cost"). Within an evaluation category, a score of 1 would be the most desirable rank for an alternative and 12 the least desirable. For each alternative, the three evaluation category ranks were added together to give an overall score. The overall scores for the alternatives were used to generate an overall rank. The alternative with the lowest overall score was given the most desirable overall ranking of 1 and the alternative with the highest overall score was ranked 12 (least desirable). The alternatives with the four best overall ranks (i.e. ranked 1 through 4) were selected for further study as potential corridors, while the remaining eight alternatives were eliminated from further consideration.

NMFS feels that the analysis placed too much emphasis on "purpose and need" and "total cost" which determined two-thirds of the overall score used to determine the final rankings of the alternatives, while all the other project considerations were lumped together under "environmental involvement" which only counted one-third toward the overall score. Within the "environmental involvement" matrix (shown in Table 4-2 of the report) are seven sub-categories used to determine the environmental involvement rankings for the alternatives. The seven sub-categories mix natural resource, cultural resource, and sociocultural resource metrics that do not mesh particularly well (e.g. why is the "number of commercial parcels" that would be taken by an alignment, in the same matrix with "pristine lands as % of total area" or number of "archaeological/historic sites"?). NMFS believes that natural resources should be analyzed separately from cultural and sociocultural resources. The Florida Department of Transportation has always treated these three resource categories as separate issues when projects move through the Efficient Transportation Decision Making process. Among the natural resource sub-categories, some are too broad to effectively characterize an alternative's impacts on natural resources very well. For example, the sub-category "wetlands as % of total area" makes no distinction between the various wetland types to be impacted or the level of ecological service they provide (e.g. impacts to one acre of pristine East Bay salt marsh was considered equivalent to one acre of roadside ditch impacts when measured this way). NMFS suggests that once the framework for the corridor alternatives evaluation had initially been developed,

that the Environmental Technical Advisory Team members should have been consulted to help select the most appropriate metrics to use for the analysis within their field of expertise.

If you have questions regarding our views on this project, please contact Dr. Dave Rydene in our St. Petersburg, Florida office. Dr. Rydene may be reached at the letterhead address or by calling (727) 824-5379.

Sincerely,

Signed by W. Mark Thompson/for

Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

cc:
F/SER4
F/SER46 - Rydene

cc: email
EPA (Ted Bisterfeld)
FL DEP (Lauren Milligan)
FL FWCC (Maryann Poole)
FWS (Mary Mittiga)

NMFS Comment	FDOT Response
1. NMFS feels that the analysis placed too much emphasis on "purpose and need" and "total cost" which determined two-thirds of the overall score used to determine the final rankings of the alternatives, while all the other project considerations were lumped together under "environmental involvement" which only counted one-third toward the overall score.	An important consideration is that this analysis is an assessment of the corridor alternatives and not the roadway alignment alternatives. In this regard it was necessary that the three major evaluation categories were given equal weighting. Additionally, because the corridor alignments do not represent the actual impacts of a roadway alignment that has been designed to avoid and minimize impacts to the best extent possible within each corridor, there is a reasonable basis to maintain equal weighting between the categories.
2. NMFS believes that natural resources should be analyzed separately from cultural and sociocultural resources.	Because of the characteristics of the study area, particularly the lack of sociocultural resources to be impacted, it was reasoned that separating these two environmental impact categories would give undo weighting to the physical environmental impacts. Doing so would give the natural environmental impacts 25% of the consideration, which would be equal to the considerations given to Purpose and Need and the natural environmental impacts, which have been commented on by the ETAT as being of greater concern. However, the physical environment could not be excluded from consideration either. Therefore combining the physical environmental impacts with the natural environmental impacts was the best solution. As we proceed into the EIS analysis, a far more detailed analysis will be completed for both types of environmental impacts, and each will be evaluated separately as the alternative alignments are compared.
3. Among the natural resource sub-categories, some are too broad to effectively characterize an alternative's impacts on natural resources very well.	One of the challenges in completing this analysis was that most of the existing data, be it from the ETDM screening review data sets or elsewhere, did not provide information on impacts that helped to distinguish the corridors from each other. After a thorough review of all of the EST data sets, it was determined that the vast amount of information did not provide any clearer separation between the corridors. As such, it was determined that using fewer data sets which provided a broader indication of impacts was easier to comprehend and more effective. As the project moves forward into the alternative alignments analysis, the incorporation of field-surveyed data will help to ensure that the best information is available for evaluating the roadway alignments.

United States Department of the Interior

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IN REPLY REFER TO:

April 28, 2009

Mr. Alan Vann
Florida Department of Transportation
District 3
Environmental Management Office
P.O. Box 607
Chipley, Florida 32428-0607

Re: Florida Department of Transportation
Gulf Coast Parkway (ETDM # 7559)
Corridor Alternatives Evaluation Summary Report
FPID # 410981-1-14-01
FWS # 2009-TA-0168
St. Andrew Bay/St. Joseph Bay
Bay and Gulf Counties, Florida

Dear Mr. Vann:

Thank you for providing the Fish and Wildlife Service (Service) with an opportunity to comment on the Corridor Alternatives Evaluation Summary Report (CAESR) released on March 31, 2009, for the Gulf Coast Parkway. This response is provided in accordance with provisions of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*).

The purpose of the CAESR is to evaluate the 12 alternatives for the Gulf Coast Parkway and identify corridors to move forward for more detailed study during the Environmental Impact Study (EIS). The corridor determination is based on meeting the project's purpose and need criteria, environmental impacts, and the total cost. Corridors 8, 14, 15, and 17 have been identified for further study in the EIS.

The Service has the following comments on the decision matrix used to assess environmental impacts. The indices for ranking natural resource impacts were: % Special Flood Hazard Area, Florida Natural Areas Inventory (FNAI) Threatened and Endangered Species Elemental Occurrence Data, % Pristine Land Area in the Florida Land Use Cover Classification (FLUCCS), and % Wetlands. Special Flood Hazard Area is a category defined by the Federal Emergency Management Agency (FEMA) for identifying areas at risk of flood inundation.

These areas may include both natural floodplains and low elevation sites (both natural and developed); therefore it is not a consistent indicator of natural resource impacts. This indicator may be more appropriate for determining consistency with purpose and need. It reflects the potential for road flooding – which may negatively impact the suitability of the roadway for hurricane evacuation.

There are also limitations inherent in using FNAI elemental occurrence (EO) data to indicate potential for impacts to threatened and endangered species. Much of the Gulf Coast Parkway is along new corridors which likely have not been surveyed for the presence/absence of protected and rare species. FNAI EOs may be higher for corridor alternatives that follow existing alignment since surveys are more likely to have occurred. This data bias should be noted in your methodology discussion. Have preliminary species surveys of the corridors been conducted by FDOT? If so, this data would provide a more realistic comparison of potential for threatened and endangered species.

Your analysis uses the Florida Land Use Cover Classification System (FLUCCS) to identify pristine lands within each corridor. This data layer was developed in 1995 to assist the Northwest Florida Water Management District with planning, environmental, and regulatory activities associated with land use. While it identifies land use and vegetative cover, it does not look at the quality of natural cover. Other data layers are available that may better capture potential pristine lands and high quality natural areas. For example, FNAI's 2001 Potential Natural Areas data layer ranks habitat quality from low to high. FNAI also has a data layer for Priority Conservation Areas for Rare Species that indicates potential for high quality habitat. Similarly, the Integrated Wildlife Habitat Ranking System was developed by the Florida Wildlife Conservation Commission at a statewide scale to rank landscape based on wildlife habitat needs.

Wetland impacts were assessed as % total wetlands. This approach does not distinguish between high and low quality wetlands and their use by wildlife. FNAI has a data layer for Priority Wetlands that could better determine affects to high quality wetlands.

Better indices could have been developed to determine the extent of impacts to natural resources from the various corridor alternatives. Coordination with natural resource agencies prior to the selection of environmental criteria could have resolved this issue. However, the Service for the most part agrees that the alignments of the four corridors chosen reflect a "reasonable" range of alternatives to move forward into the EIS process. One outstanding concern is the northern terminus for Corridor 17 along Star Avenue, which may have substantial impacts to Panama City crayfish habitat. We recommend including the northern segment of Corridor 18 (between SR 22 and US 231) as an alternate terminus for Corridor 17.

We appreciate the opportunity to provide comments. We look forward to working with you as project studies continue during the EIS. Please contact Ms. Mary Mittiga of this office (ext. 236) if you have any questions or comments.

Sincerely,

Janet Mizzi
Deputy Field Supervisor

cc:
ACOE, Cocoa, FL (Andrew Phillips)
EPA, Atlanta, GA (Ted Bisterfeld)
FDEP, Pensacola, FL (Larry O'Donnell)
FWC, Tallahassee, FL (Ted Hoehn, Scott Sanders)
NMFS, St. Petersburg, FL (Dave Rydene)

USFWS Comment	FDOT Response
1. Have preliminary species surveys of the corridors been conducted by FDOT?	Species surveys were not completed for each of the 12 corridors. This was due to the combination of corridor length and land accessibility, as well as time and cost constraints. However, as a part of the alternative alignment analysis each alignment will be surveyed in detail for each of the data indices mentioned in the USFWS's comments. Further, these field analyses will occur in accordance with the methodologies that were developed with the help of the USFWS along with the other natural resource agencies who participated in the Issue Action Plans developed for this project.
2. Better indices could have been developed to determine the extent of impacts to natural resources from the various corridor alternatives. Coordination with the natural resource agencies prior to the selection of environmental criteria could have resolved this issue.	As previously mentioned, because of the large amount of area covered by the 12 alternative corridors data sets which provided consistent data across all 12 corridors had to be used. One of the challenges in completing this analysis was that most of the existing data, be it from the ETDM screening review data sets or elsewhere, did not provide information on impacts that helped to distinguish the corridors from each other. After a thorough review of all of the EST data sets, it was determined that the vast amount of information did not provide any clearer separation between the corridors. As such, it was determined that using fewer data sets which provided a broader indication of impacts was easier to comprehend and more effective. As the project moves forward into the alternative alignments analysis, the incorporation of field-surveyed data will help to ensure that the best information is available for evaluating the roadway alignments. The opportunity to coordinate with the resource agencies for improving upon the information in each of these data sets will be fully utilized as we move onto the alternative alignments analysis.
3. We look forward to working with you as project studies continue during the EIS.	The input from and coordination with all of the ETAT representatives and their agencies has been and will continue to be invaluable as we move forward with the EIS. Thank you for your comments.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

April 24, 2009

Mr. Alan Vann, Project Manager
Environmental Management Office
Florida Department of Transportation, District 3
Post Office Box 607
Chipley, Florida 32428-0607

Phone: (850) 415-9523
Email: Alan.Vann@dot.state.fl.us

SUBJECT: Review of Gulf Coast Parkway Corridor Alternatives Evaluation Summary Report; ETDM Project No. 7559

Dear Mr. Vann:

EPA has reviewed the subject Report as requested by Florida Department of Transportation, and is providing our comments. EPA is a member of the Environmental Technical Advisory Team for this proposed new highway in Gulf and Bay Counties, Florida.

Alternatives Evaluation Criteria

EPA appreciates that this alternatives analysis is not all-inclusive, so some of our comments should be considered as guidance on forthcoming, more detailed evaluations. Implementability is not a screening criterion, however, project costs but costs are a key factor and are tabulated at the end of Section 2, Table 2-4. It is important to include costs for environmental impacts mitigation and it is not clear whether they are included in the estimates. When a project bypasses established communities, there can be beneficial and adverse social and economic impacts, and it does not appear that all of these costs are included.

One of the alternatives evaluation criteria, number 6, is to expand capacity of existing US 98. This is confusing because all of the alternatives define routes avoiding US 98 through Tyndall Air Force Base, and there is no alternative to widen or otherwise engineer all of existing US 98. It is normally understood that removing traffic from a roadway (US 98) could improve its level of service, not the roadway's capacity.

The environmental criteria established for this review can lead to misleading results. One example is the consideration of "pristine areas". This is not one of the standard environmental issues utilized in the ETDM screening reviews, and the definition of it can be problematic. A more important criterion might be "habitat bisection" a factor that has been utilized in many transportation analyses especially where road kill potential

is high and listed species are present. This project could have some of those areas. Basically, there are three environmental factors considered, flood hazard, wildlife habitat, and wetlands. EPA recommends a review of the ETDM screening review criteria for additional or more appropriate environmental issues. The social issues addressed are residential, business and agricultural parcels traversed. At this stage of analyzing 800/400 feet wide corridors, the numbers in Table 2-3 are skewed in favor of large, single owner parcels, and are almost meaningless until estimates are made of potential relocations. The archaeological/historical sites are few for each of the alternative corridors, and no historic districts are identified.

Improve Existing Roadways

EPA understands that this is not yet a NEPA analysis although the Federal Highway Administration has issued a Notice of Intent to prepare an EIS. The alternatives analysis at some point must consider the "no action alternative" and new alignment projects normally consider improving existing roadway(s) as well. FDOT and or Federal Highway Administration stated in one of the ETDM/ETAT meetings that widening Tyndall Parkway (US 98) along the beach would not meet the purpose and need for the project. Looking ahead to the alternatives analysis in the EIS, EPA suggests that at least one alternative should be to improve existing roadways.

This Report does not recommend Alternative 16 for continued evaluation. This alternative is 41.5 miles in length, much longer than all other alternatives, but it utilizes the most existing paved roadway, SR 386 and SR 22. It also includes Jarrott Daniels Road, an 8-mile long unpaved roadway, to connect the CR 386 segment to SR 22. From a NEPA perspective, addressing an alternative that improves existing roadways is desirable. Accordingly, EPA recommends retaining this alternative in the alternatives analysis of the EIS. While the data indicate that this alternative could have 30 listed species of concern within the corridor, in further analysis it is probable that utilizing existing roadways could lessen the potential direct impacts to many of those species. As the project review proceeds, it will be appropriate to qualify misleading results for this alternative. With so much existing roadway, it may be difficult to define this alternative as largely a pristine area in a detailed review. Alternative 16 would broaden the scope of alternatives for the NEPA review by its location and characteristics

Alternative Build Corridors

In Table 2-2, the comparison of environmental impacts for the alternatives indicates that Alternatives 7 and 17 have over 100 acres of estuarine wetlands impacts. Do these quantities include corridor area below mean low water? We reviewed aerial photography, and for the evaluation to result in this amount of acreage, it seems possible that submerged lands have been categorized as estuarine emergent wetland impacts.

The report does not make clear why there are several terminus points at the western end of the project at US 231. EPA would like to see additional combinations of alternatives such as Alternatives 7 and 17 following the Alternative 18 corridor from SR

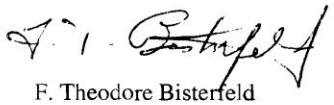
22 to its terminus at US 231 near Penny Road. In general, there should be some indication that these defined corridors could be further "tweaked" in further environmental analyses to minimize adverse impacts. Additionally, it may be possible for Alternative 17 to follow Old Allanton Rd to its intersection with SR 22 to avoid new crossings of Laird Bayou and Cushion Creek. In Table 2-2, Alternative 17 has 1,361 acres of palustrine wetland impacts when this alternative avoids the numerous creek crossings of many of the other alternatives. This number should be verified. Also of note, this alternative has by far the lowest amount of flood hazard area traversed of all the alternatives, but has the highest total amount of wetlands impact.

Hurricane evacuation is a highly regarded criterion in the evaluation. For those alternatives not utilizing the existing US 98 roadway, there is really not a substantial different in the benefit. Merging this traffic onto US 231 with all of the Panama City evacuees is potentially detrimental. Overall, only improvements connecting to and improving SR 71 appear to have substantial evacuation benefit. There are no alternatives involving SR 71 being considered in this report.

In the final comparison, Alternatives 14 and 18 are pared up as being somewhat similar. However, EPA recognizes substantial differences in the segments north and south of SR 22. Because of the reasons of the use of existing roadway by Alternative 18, it merits selection over Alternative 14.

Thank you for the opportunity to comment on the Corridor Evaluation Report. EPA will remain fully involved with the environmental review of this project. Please contact me at 404/562-9621 or at bisterfeld.ted@epa.gov if you wish to discuss EPA's comments.

Sincerely,



F. Theodore Bisterfeld
NEPA Program Office

USEPA Comment	FDOT Response
1. It is important to include costs for environmental impacts mitigation and it is not clear whether they are included in the estimates.	Wetland mitigation costs were not included in the alternative corridor analysis. Since the corridors are 400' to 800' wide and the alternative alignments (upon which the mitigation estimates would be based) will be 250' wide the corridors' wetland impact numbers do not present accurate enough information to provide a reasonable assessment of wetland mitigation impacts. This information will be provided as a part of the cost estimates for the alternative alignments assessment.
2. One of the alternatives evaluation criteria, number 6, is to expand capacity of existing US 98. This is confusing because all of the alternatives define routes avoiding US 98 through Tyndall Air Force Base, and there is no alternative to widen or otherwise engineer all of existing US 98. It is normally understood that removing traffic from a roadway (US 98) could improve its level of service, not the roadway's capacity.	Thank you for this observation. The wording should have been more accurately written to clarify that the intent is to improve the level of service on existing US 98 (Tyndall Parkway).
3. EPA recommends a review of the ETDM screening review criteria for additional or more appropriate environmental issues.	One of the challenges in completing this analysis was that most of the existing data, be it from the ETDM screening review data sets or elsewhere, did not provide information on impacts that helped to distinguish the corridors from each other. After a thorough review of all of the EST data sets, it was determined that the vast amount of information did not provide any clearer separation between the corridors. As such, it was determined that using fewer data sets which provided a broader indication of impacts was easier to understand and more effective. As the project moves forward into the alternative alignments analysis, the incorporation of field-surveyed data will help to ensure that the best information is available for evaluating the roadway alignments.
4. This Report does not recommend Alternative 16 for continued evaluation. This alternative is 41.5 miles in length, much longer than all other alternatives, but it utilizes the most existing paved roadway, SR 386 and SR 22. It also includes Jarott Daniels Road, an 8-mile long unpaved roadway, to connect the CR 386 segment to SR 22. From a NEPA perspective, addressing an alternative that improves existing roadways is desirable. Accordingly, EPA recommends retaining this alternative in the alternatives analysis of the EIS. While the data indicate that this alternative could have 30 listed species of concern within the corridor, in further analysis it is probable that utilizing existing roadways could lessen the potential direct impacts to many of those species. As the project review proceeds, it will be appropriate to qualify misleading results for this alternative. With so much existing roadway, it may be difficult to define this alternative as largely a pristine area in a detailed review. Alternative 16 would broaden the scope of alternatives for the NEPA review by its location and characteristics	As a part of the PD&E process the no-build alternative must remain in consideration until a preferred alternative is selected. In regards to Alternative Corridor 16 it is important to remember that each of the corridors were subjected to an analysis which extended beyond only environmental impacts. As discussed in the report, "**Corridor 16** ranked as the worst corridor in the purpose and need and total cost categories, it was also the second worst ranked corridor in the environmental involvement category." As such, it was not solely a result of poor natural environmental data indices that this corridor was not recommended for further analysis.

5. In Table 2-2, the comparison of environmental impacts for the alternatives indicates that Alternatives 7 and 17 have over 100 acres of estuarine wetlands impacts. Do these quantities include corridor area below mean low water? We reviewed aerial photography, and for the evaluation to result in this amount of acreage, it seems possible that submerged lands have been categorized as estuarine emergent wetland impacts.	The data used for identifying the different wetland types in the analysis came from the FGDL NWI shape files. It is very likely that a portion of the quantities identified as estuarine for Corridors 7 and 17 were actually submerged lands that were characterized as emergent wetland impacts. As part of the alternatives analysis these corridors and subsequent alignments designed through them will be field surveyed so that the most accurate information will be available.
6. The report does not make clear why there are several terminus points at the western end of the project at US 231. EPA would like to see additional combinations of alternatives such as Alternatives 7 and 17 following the Alternative 18 corridor from SR 22 to its terminus at US 231 near Penny Road. In general, there should be some indication that these defined corridors could be further "tweaked" in further environmental analyses to minimize adverse impacts. Additionally, it may be possible for Alternative 17 to follow Old Allanton Rd to its intersection with SR 22 to avoid new crossings of Laird Bayou and Cushion Creek.	Part of the alternative analysis design and evaluation will be to consider how the improved data that is obtained through field surveys should affect the location of the alignment. As such, the EPA's comments in regards to identifying Old Allanton Road and avoiding new crossings of Laird Bayou and Cushion Creek are appreciated. These factors will be taken under consideration during the analysis and perhaps incorporated should it be determined as the best course for the avoidance and minimization of impacts.
7. Hurricane evacuation is a highly regarded criterion in the evaluation. For those alternatives not utilizing the existing US 98 roadway, there is really not a substantial different in the benefit.	As best as possible quantifiable criterion were utilized for comparing hurricane evacuation as a part of the Purpose and Need evaluation. Since an alignment which terminated at or improved SR 71 did not meet the Purpose and Need of the project this scenario was not considered for comparing the hurricane evacuation benefits.
8. In the final comparison, Alternatives 14 and 18 are pared up as being somewhat similar. However, EPA recognizes substantial differences in the segments north and south of SR 22. Because of the reasons of the use of existing roadway by Alternative 18, it merits selection over Alternative 14.	As the EPA mentioned in comment 6, the possibility for "tweaking" the alternative alignments so that they are designed to best avoid and minimize impacts is to be a consideration during the EIS study. The EPA's comments in regards to Corridor 14 versus Corridor 18 will be taken under advisement during this process.
9. Thank you for the opportunity to comment on the Corridor Evaluation Report. EPA will remain fully involved with the environmental review of this project.	The input from and coordination with all of the ETAT representatives and their agencies has been and will continue to be invaluable as we move forward with the EIS. Thank you for your comments.

Northwest Florida Water Management District

81 Water Management Drive, Havana, Florida 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee)

(850) 539-5999 • (Fax) 539-2777

Douglas E. Barr
Executive Director

April 24, 2009

Mr. Alan Vann, Project Manager
FDOT District Three
Highway 90 East
Chipley, Florida 32428-0607

RE: Gulf Coast Parkway (ETDM # 7559)

Dear Mr. Vann:

From our understanding of previous email and ETDM correspondence the NWFWMD has done a cursory survey of the area. GIS staff at the NWFWMD have adjusted the buffer as indicated in the CASER report to 250 feet and under this scenario about 329 to 691 acres of wetlands impact would occur (see table below). The 250 foot buffer is based only on a preliminary analysis of wetland impacts conducted by NWFWMD; however it does appear to be a more realistic foot print or buffer. Nevertheless in both instances, whether a 250' buffer or the wider one was used, alternative 17 still results in as much as double the wetland impact. From a wetlands impact and costs point of view this would be considerable and a closer look is suggested prior to judging the top four alternatives listed.

Another observation made by staff is that sufficient wetlands mitigation appears to be available locally within the watersheds proposed to be impacted. One problem noted is that the analysis in the report does not give a good understanding of the quality or type of wetland impacted which is an important consideration with respect to wetlands impacts and mitigation. Mitigation feasibility of course also assumes there is a willing seller for the NWFWMD to purchase or set aside large wetland parcels to preserve, perpetually manage and restore.

Alternative No.	Acres NWI w/ 250' wide Buffer	Acres NWI from CAESR	Preference Ranking from CAESR
7	478	1042	Not identified for further study
8	462	998	Ranked #2 in CAESR
9	378	998	Not identified for further study
10	404	974	Not identified for further study
11	485	1023	Not identified for further study
12	400	910	Not identified for further study
13	426	995	Not identified for further study
14	419	1010	Tied with #15 for #3 Ranking
15	330	872	Tied with #14 for #3 Ranking
16	328	891	Not identified for further study
17	691	1462	Ranked #1 in CAESR
18	383	950	Not identified for further study

It is not clear if in Table 2-4 of the report the environmental mitigation costs are included. Expenses for land acquisition, restoration, and perpetual management of preserved land for environmental mitigation are going to be considerable and should be included in this table. As an example the cost difference between Alternative 17 and 14 is estimated at $14.7million. This could easily be reversed when considering just the difference between required expense for long term management, restoration, and maintenance costs of the mitigation sites for these two alternatives.

We note that there is also considerable potential for flood plain impacts; however the actual foot print of the buffer reported is not an actual indication of the impacts that may occur on the flood plain. Significant impacts to the flood plain may also occur both upstream and downstream of the actual foot print of the alternative. Depending upon the road structures (causeway, approaches, bridge piers, span height, etc.) which may physically alter the flood plain food waters may be higher or lower much further away and cover a larger area than just the foot print. The NWFWMD as FEMA's Cooperating Technical Partner (CTP) for flood plain mapping would like to cooperate, collaborate, and assist in the coordination of map changes or any analysis related to a rise in flood elevations or structural modification of storage in the flood plain. It is important that any causeway construction be given careful consideration as to not increase flooding and/or address changes in current flood maps as required by federal guidelines and regulations. For example it would be important for FDOT to adhere to the Code of Federal Regulations (CFR), Title 44, Chapter I - Federal Emergency Management Agency, Department of Homeland Security, Chapter I, Parts 9 and 60. Of course we would, as requested by the Department, or through ETDM participate in the flood hazard re-mapping and flood plain analysis process to assist with the determination of map changes and associated flooding or flood plain impacts.

Please also note that the Table for flood plain area seems to be in error and may be typo for alternative 17.

We look forward to the Development of the EIS and hope to continue to collaborate with you on the final alternatives you choose through the ETDM process.

Thank you.

Sincerely,

Ron Bartel, Director
Resource Management Division

RB:em
cc: Wendy Lasher, PBS&J

NWFWMD Comment	FDOT Response
1. Nevertheless in both instances, whether a 250' buffer or the wider one was used, alternative 17 still results in as much as double the wetland impact. From a wetlands impact and costs point of view this would be considerable and a closer look is suggested prior to judging the top four alternatives listed.	Corridor 17's Overall Environmental Performance Rank was 6th, and its wetlands Criterion Rank was 12th (the worst). However, the corridor's performance in the other criteria beyond wetlands (both inside and outside of the Environmental Involvement analysis) deemed it as the overall top ranked corridor. During the process of developing the alternative alignments within the Corridors Identified for Further Analysis the goal will be to best develop alignments which avoid and minimize impacts. For Corridor 17 a primary concern will be to achieve this as best as possible for avoiding wetland impacts.
2. One problem noted is that the analysis in the report does not give a good understanding of the quality or type of wetland impacted which is an important consideration with respect to wetlands impacts and mitigation.	Field surveys for wetlands, along with other natural and physical environmental impacts will be completed for the alternative alignments analysis. This information will be available to the ETAT during the development of the DEIS.
3. It is not clear if in Table 2-4 of the report the environmental mitigation costs are included.	Wetland mitigation costs were not included in the alternative corridor analysis. Since the corridors are 400' to 800' wide and the alternative alignments (upon which the mitigation estimates would be based) will be 250' wide the corridors' wetland impact numbers do not present accurate enough information to provide a reasonable assessment of wetland mitigation impacts. This information will be provided as a part of the cost estimates for the alternative alignments assessment.
4. The NWFWMD as FEMA's Cooperating Technical Partner (CTP) for flood plain mapping would like to cooperate, collaborate, and assist in the coordination of map changes or any analysis related to a rise in flood elevations or structural modification of storage in the flood plain.	Thank you for mentioning this consideration as we move forward with the alternative alignment design and analysis we will be sure coordinate with the NWFWMD on this matter.
5. Please also note that the Table for flood plain area seems to be in error and may be typo for alternative 17.	The numbers were re-checked and confirmed to be correct. The software utilized for this analysis was ArcMap Version 9.3; the data came from the FGDL 2000 Bay County fema96 shape file; and the shape file clipped was the Corridor 17 800' rural, 400' urban polygon shape file.
6. We look forward to the Development of the EIS and hope to continue to collaborate with you on the final alternatives you choose through the ETDM process.	The input from and coordination with all of the ETAT representatives and their agencies has been and will continue to be invaluable as we move forward with the EIS. Thank you for your comments.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
COCOA REGULATORY OFFICE
400 HIGH POINT DRIVE, SUITE 600
COCOA. FLORIDA 32926

REPLY TO
ATTENTION OF

April 30, 2008

Regulatory Division
North Permits Branch
ETDM#7559

Mr. Alan Vann
Project Manager
Florida Department of Transportation District Three
Environmental Management Office
1074 Highway 90 East
Chipley, Florida 32428-2162

Dear Mr. Vann:

The U.S. Army Corps of Engineers (Corps) has reviewed the Corridor Alternatives Evaluation Summary Report completed for the Gulf Coast Parkway PD&E Study, dated January 2009. The Corps generally concurs with the corridor analysis provided; however, the summary report has not accounted for comments provided as a result of the environmental screening of the project by the Environmental Technical Advisory Team (ETAT). Each ETAT member spent several hours reviewing the proposed corridors and ranking each one based on their perspective discipline. The Corps feels it would be beneficial to include these rankings in any evaluation that would narrow prospective alternatives.

You are reminded as the corridor analysis moves forward that the Corps, as the agency charged with the management of Section 404 of the Clean Water Act (33 U.S.C. 1344), is required to consider all practicable alternatives. The guidance for this review is given by the National Environmental Policy Act (NEPA) and Section 404(b)(1) Guidelines. Section 404 (b)(1) Guidelines requires the Corps analysis to sequentially consider: 1. Alternatives to the site selected; 2. Minimization of the impacts; and lastly 3. Mitigation for unavoidable impacts.

The remaining restrictions on discharges under the Guidelines are as follows:

a. no discharge of dredged or fill material shall be permitted if it causes or contributes to violations of any State water quality standard, violates any toxic effluent standard under Section 307 of the Clean Water Act, jeopardizes the

continued existence of a threatened or endangered species or destroys or adversely modifies critical habitat, or violates requirements to protect any designated marine sanctuary;

b. no discharge of dredged or fill material shall be permitted which would cause or contribute to significant degradation of waters of the United States; and

c. no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

Under the Guidelines, effects contributing to significant degradation may include; significant adverse effects of the discharge on human health or welfare, including but not limited to effects on municipal water supplies, fish, wildlife, and special aquatic sites; significant adverse effects of the discharge on life stages of aquatic life and other wildlife dependent on aquatic ecosystem diversity, productivity, and stability, such as loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water or reduce wave energy; or significant adverse effects of the discharge on recreational, aesthetic, and economic values. Additionally, the Corps wetland policy states that no permit will be granted to alter wetlands considered important to the public interest unless the benefits are greater than the damage to the wetland resource.

Thank you for the opportunity to comment on the Corridor Alternatives Evaluation Summary Report. Questions should be directed to my attention at the letterhead address, by telephone at (321) 504-3771 extension 14, or by email at andrew.w.phillips@usace.army.mil.

Sincerely,

Andrew W. Phillips
Project Manager

Copy Furnished (electronically):

PBS&J
EPA, Atlanta
USFWS, Panama City
NMFS, St. Pete
FDOT, Chipley

USCOE Comment	FDOT Response
1. The Corps generally concurs with the corridor analysis provided; however, the summary report has not accounted for comments provided as a result of the environmental screening of the project by the Environmental Technical Advisory Team (ETAT).	The ETAT's comments were taken into consideration as a contributing factor towards helping to determine the reasonability of the corridors that were and were not identified for further analysis. Additionally, the ETAT's comments, along with continued coordination efforts will be highly utilized during the alternative alignments development and analysis process.
2. You are reminded as the corridor analysis moves forward…	The information provided in the Corps comments are appreciated. These factors will continue to be considerations as we move forward with the study.
3. Thank you for the opportunity to comment on the Corridor Alternatives Evaluation Summary Report.	The input from and coordination with all of the ETAT representatives and their agencies has been and will continue to be invaluable as we move forward with the EIS. Thank you for your comments.

Mr. Vann:

We have reviewed the Corridor Alternatives Evaluation Summary Report (CAESR) for ETDM 7559 in Gulf County for the Gulf Coast Parkway per Ms. Lasher's request in her April 21, 2009 e-mail. FWC biologists have also reviewed and provided comments on fish and wildlife resource impacts on this project to the Florida Department of Transportation (FDOT) in October 2005 during the SAI Process through the Florida State Clearinghouse at the Florida Department of Environmental Protection; provided comments during the ETDM process in April 2006 on the Programming Phase; and participated in the ETDM Dispute Resolution Process with FDOT in October and November 2006. We recently coordinated with the U.S. Fish and Wildlife Service (USFWS), and we concur with their view that better indices could have been developed to determine the level and extent of impacts to wildlife and habitat resources associated with the 12 Alternatives for the project. However, we also concur with the USFWS that the current Alignments within the four chosen corridors define a reasonable range of Alternatives to move forward in the Environmental Impact Statement (EIS) process. We recommend including the northern segment of Corridor 18 which lies between SR-22 and US-31 as an alternate terminus for Corridor 17, since the current terminus for Alternative 17 along Star Avenue will potentially have substantial impacts to the Panama City Crayfish which is listed by FWC as a Species of Special Concern. We appreciate the opportunity to provide input, and we look forward to working with FDOT on the EIS to improve the criteria for evaluating the fish, wildlife and habitat resource impacts within the four chosen corridors, and improve the process for addressing regional habitat connectivity to reduce impacts to the black bear on this project. Please let me know if you have questions concerning our comments.

Sincerely,

Scott Sanders, Leader
Habitat Conservation Scientific Services Section
Florida Fish and Wildlife Conservation Commission
Farris Bryant Bldg.
620 South Meridian Street
Tallahassee, FL 32399-1600
phone: (850) 488-3831
Fax (850) 921-7793
Cell (850)528-4316
scott.sanders@MYFWC.com

FWC Comment	FDOT Response
1. We recently coordinated with the U.S. Fish and Wildlife Service (USFWS), and we concur with their view that better indices could have been developed to determine the level and extent of impacts to wildlife and habitat resources associated with the 12 Alternatives for the project. However, we also concur with the USFWS that the current Alignments within the four chosen corridors define a reasonable range of Alternatives to move forward in the Environmental Impact Statement (EIS) process.	One of the challenges in completing this analysis was that most of the existing data, be it from the ETDM screening review data sets or elsewhere, did not provide information on impacts that helped to distinguish the corridors from each other. After a thorough review of all of the available data sets, it was determined that the vast amount of information did not provide any clearer separation between the corridors. As such, it was determined that using fewer data sets which provided a broader indication of impacts was easier to comprehend and more effective. As the project moves forward into the alternative alignments analysis, the incorporation of field-surveyed data will help to ensure that the best information is available for evaluating the roadway alignments.
2. We recommend including the northern segment of Corridor 18 which lies between SR-22 and US-31 as an alternate terminus for Corridor 17, since the current terminus for Alternative 17 along Star Avenue will potentially have substantial impacts to the Panama City Crayfish which is listed by FWC as a Species of Special Concern.	Part of the alternative analysis design and evaluation will be to consider how the improved data that is obtained through field surveys should affect the location of the alignments. As such, the FWC's comments in regards to Corridor 17 are appreciated. These factors will be taken under consideration during the analysis and perhaps incorporated should it be determined as the best course for the avoidance and minimization of impacts.
3. We appreciate the opportunity to provide input, and we look forward to working with FDOT on the EIS to improve the criteria for evaluating the fish, wildlife and habitat resource impacts within the four chosen corridors, and improve the process for addressing regional habitat connectivity to reduce impacts to the black bear on this project.	The input from and coordination with all of the ETAT representatives and their agencies has been and will continue to be invaluable as we move forward with the EIS. Thank you for your comments.

APPENDIX C
LESSONS LEARNED

Since completion of the CAESR, receipt of the follow-up comments, and coordination with the ETAT representatives, there have been certain lessons learned that should be considered if this methodology is to be applied to a future transportation project. These are discussed below.

Methodology Review and Coordination: The most consistent comment received from the resource agencies was in regards to the lack of a methodology review by the agencies prior to the completion of the CAESR. As a result, the lack of early coordination led to several comments questioning the data indices or weighting criteria utilized in the analysis. While, it is the belief that both the data indices selected and the weighting criteria utilized are the best fit for this project, coordination with the resource agencies prior to the selection of data indices and weighting criteria is considered to be a great benefit.

Quantifiable Purpose and Need Criteria: During the development of the Purpose and Need Statement it is important to provide language that will allow for establishing quantifiable performance measures by which the corridors may be compared.

Comparison by Segments: In the corridor analysis for the Gulf Coast Parkway project, each corridor was compared as a whole to the other corridors. It has been suggested that it may be worth considering breaking the project corridors into segments and comparing segments, particularly for the Environmental Performance section. A further consideration in this direction might be to perform the evaluation such that the segments comparison is completed and then segments are identified for further study. After which those segments identified for further analysis could be combined into whole corridors and analyzed utilizing the methodology applied in this report.

Public Involvement and Local Government Plans: FHWA does not consider public input and/or consistency with local government plans as an acceptable criterion in the **corridor** ranking analysis, though they may (and should) be used to help contribute to the reasonability of the corridors identified (or not identified) for further study. These inputs may (and should) be used during the alternative alignments analysis phase.